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CATALOGUE OF BIRDS OF THE AMERICAS

BY

CHARLES E. HELLMAYR

ASSOCIATE CURATOR OF BIRDS, 1922-1944

AND

BOARDMAN CONOVER

RESEARCH ASSOCIATE, BIRDS

O. 1949

PART I, NUMBER 4

CATHARTIDAE-ACCIPITRIDAE-PANDIONIDAE
FALCONIDAE

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ZOOLOGICAL SERIES
FIELD MUSEUM OF NATURAL HISTORY
VOLUME XIII, PART I, NUMBER 4
AUGUST 19, 1949

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ZOOLOGICAL SERIES

VOLUME XIII

PART I, NUMBER 4

CHICAGO, U.S.A.
1949

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CATALOGUE OF BIRDS OF THE AMERICAS AND THE ADJACENT ISLANDS

IN

FIELD MUSEUM OF NATURAL HISTORY

INCLUDING ALL SPECIES AND SUBSPECIES KNOWN TO OCCUR IN NORTH AMERICA, MEXICO, CENTRAL AMERICA, SOUTH AMERICA, THE WEST INDIES AND ISLANDS OF THE CARIBBEAN SEA, THE GALAPAGOS ARCHIPELAGO AND OTHER ISLANDS WHICH MAY BE INCLUDED ON ACCOUNT OF THEIR FAUNAL AFFINITIES

BY

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RESEARCH ASSOCIATE, BIRDS

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PREFACE TO PART I, NUMBER 4

This, the final number of Part I, completes the *Catalogue of Birds of the Americas*. In style and arrangement it follows the guiding principles of the previous parts. As in Numbers 2 and 3 of Part I, however, because of the war and the death of Charles E. Hellmayr in 1944, the method of collaboration had to be changed somewhat from that followed in Part I, Number 1. A carbon copy of the manuscript of the Falconiformes was received in this country in 1939, but Dr. Hellmayr intended to revise the original, and bring it up to date. However, he died before he had completed the revision and before he had approved the changes found necessary because of material in Field Museum. As before, such emendations have been kept as few as possible.

The senior author alone is responsible for the manuscript. The junior author is solely responsible for the list of specimens in Field Museum, for the bibliography after 1938, and for a few changes in the manuscript made necessary by specimens acquired after Dr. Hellmayr's departure for Europe. In the one case in which a change was made in the actual taxonomy, a footnote calls attention to the fact and gives the original nomenclature. Elsewhere, when there seemed to be a discrepancy between the manuscript and the results of the study of the literature and the specimens in Field Museum, a footnote has been added with initials appended to indicate the author. Literature up to December 31, 1944 (as given in the Zoological Record) has been added. Some new forms described since that date and before December 31, 1946, and a few important papers will be found mentioned in the footnotes.

As before, the authors have been greatly benefited by the cordial co-operation of many institutions and individuals, who have lent material and submitted information. To all of them we wish to express our appreciation. Among those who have helped are Dr. John W. Aldrich, U. S. Fish and Wildlife Service; Dr. Arthur Allen, Cornell University, Ithaca; Dr. Alfred M. Bailey, Colorado Museum of Natural History; Professor J. Berlioz, Musée d'Histoire Naturelle, Paris; Mr. James Bond, Academy of Natural Sciences, Philadelphia; Mr. H. W. Brandt, Cleveland, Ohio; the late Major Allan Brooks, Okanagan Landing, Canada; the Chicago Academy of Sciences; Dr. Herbert Friedmann, United States National Museum; Professor O. Fuhrmann, University of Neuchâtel; Count Nils Gyldenstolpe,

Vetenskapsakademien, Stockholm; the Museum of the University of Kansas, Lawrence; Captain N. B. Kinnear, British Museum (Natural History); Professor A. Laubmann, Zoological Museum, Munich; Messrs. F. C. Lincoln and W. L. McAtee, U. S. Fish and Wildlife Service; Mr. J. D. Macdonald, British Museum (Natural History); Dr. Alden H. Miller, Museum of Vertebrate Zoology, Berkeley, California; the late James Moffitt, California Academy of Sciences, San Francisco; Mr. Olaus Murie, U. S. Fish and Wildlife Service; Dr. Robert T. Orr, California Academy of Sciences; Dr. Max Peet, Ann Arbor, Michigan; Dr. James L. Peters, Museum of Comparative Zoology, Cambridge, Massachusetts; Mr. William H. Phelps, Caracas, Venezuela; Dr. R. A. Philippi-B., Museo Nacional de Chile, Santiago; Professor William Rowan, University of Edmonton, Alberta; Mr. R. M. de Schauensee, Academy of Natural Sciences, Philadelphia; Count Josef Seilern, Lukov; Professor Morriz Sassi, Naturhistorisches Museum, Vienna; Mr. L. L. Snyder, Royal Ontario Museum, Toronto; the late P. A. Taverner, National Museum of Canada, Ottawa; Mr. W. E. Clyde Todd, Carnegie Museum, Pittsburgh; Mr. A. J. van Rossem, Los Angeles, California; Dr. Josselyn Van Tyne, Museum of Zoology, University of Michigan, Ann Arbor; Dr. Alexander Wetmore, United States National Museum; Dr. John T. Zimmer, American Museum of Natural History, New York.

We are also indebted to Dr. Charles Baehni, Director of the Conservatoire et Jardin Botaniques, Geneva, Switzerland, for his custodianship of the manuscript after Dr. Hellmayr's death.

Of the Museum Staff, especial acknowledgment is due to the late Dr. Wilfred H. Osgood, Curator Emeritus, Department of Zoology; Mr. Karl P. Schmidt, Chief Curator, Department of Zoology; and Dr. Austin L. Rand, Curator, Division of Birds, for their help and advice to the junior author; to Mr. Melvin A. Traylor, Jr., Associate, Division of Birds; to Mr. Emmet R. Blake, Associate Curator, Division of Birds, who was responsible for the compilation of the index; and to Miss Lillian A. Ross, Associate Editor of Scientific Publications, for reading the manuscript and seeing through the press the last six parts of the *Catalogue of Birds of the Americas.*

BOARDMAN CONOVER

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CATALOGUE
OF
BIRDS OF THE AMERICAS

PART I
NO. 4

BY CHARLES E. HELLMAYR AND BOARDMAN CONOVER

Order FALCONIFORMES

Suborder CATHARTAE

Family CATHARTIDAE. Condors and Vultures

Genus VULTUR Linnaeus

Vultur Linnaeus, Syst. Nat., 10th ed., **1**, p. 86, 1758—type, by subs. desig. (Allen, Bull. Amer. Mus. N. H., **24**, p. 11, Dec., 1907), *Vultur gryphus* Linnaeus.

Gryphus Bonaparte, Rev. Mag. Zool., (2), **6**, p. 530, 1854—type, by tautonymy, *Vultur cuntur* "Dum." (*condor* Less.)=*Vultur gryphus* Linnaeus.

*Vultur gryphus Linnaeus. CONDOR.

Vultur gryphus Linnaeus, Syst. Nat., 10th ed., **1**, p. 86, 1758—based on "Vultur gryps Gryphus" Klein (Hist. Av. Prodr., p. 45) and "Cuntur" Raius (Syn. Av., p. 11), Chile;[1] Humboldt, in Humboldt and Bonpland, Obsers. Zool. Anat. Comp., **1**, pp. 26–45, pls. 8, 9, circa 1806—Andes of Colombia, Ecuador (Chimborazo), and Peru (descr.; habits); Scott and Sharpe, Rep. Princet. Univ. Exped. Patagonia, **2**, (2), p. 526, 1915—Cape Fairweather, Patagonia; Chubb, Ibis, 1919, p. 278—Sinche, Guaranda, Ecuador; Swann, Syn. Accip., p. 1, 1921—Venezuela to Patagonia; Lönnberg and Rendahl, Ark. Zool., **14**, No. 25, p. 29, 1922—Pichincha and near Zambiza, Ecuador; Swann, Monog. Bds. Prey, **1**, p. 2, 1924 (monog.); Chapman, Bull. Amer. Mus. N. H., **55**, p. 216, 1926—Pichincha and Chimborazo, Ecuador; Peters, Bds. World, **1**, p. 189, 1931 (range); Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **19**, p. 293, 1932—Chile (full bibliog.); Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 376, 1936—Catamarca (Andalgalá), Neuquén, Santa Cruz

[1] In Ray's account the locality Herradura, not far from the Isla La Mocha, off Arauco, is specifically mentioned.

(Rio Deseado) (full bibliog. for Argentina); Housse, Bol. Mus. Hist. Nat. "Javier Prado," Lima, **4**, p. 233, 1940 (gen. acc.); Lehmann, Rev. Acad. Colombiana Cienc., Bogotá, **3**, p. 457, pl. 2, 1940 (gen. acc.).

Vultur magellanicus Shaw, Mus. Lever., **1**, p. 1, pl. 1, 1792—Straits of Magellan (type in Leverian Museum, now in Vienna Museum; cf. Pelzeln, Ibis, 1873, p. 16).

Vultur condor Shaw, Gen. Zool., **7**, (1), p. 2, pls. 2–4, 1809—new name for *Vultur magellanicus* Shaw.

Gypagus gryffus Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **36**, p. 450, 1819—emendation of *Vultur gryphus* Linnaeus.

Cathartes gryphus Temminck, Nouv. Rec. Pl. Col., livr. 23, pls. 133, 408, 494, June, 1822 (monog.; fig. of adult and young).

Sarcoramphus condor Lesson, Traité d'Orn., livr. 1, p. 25, Feb., 1830—new name for *Vultur gryphus* Linnaeus; Gay, Hist. Fís. Pol. Chile, Zool., **1**, p. 194, pl. (osteology), 1847—Chile (habits).

Sarcoramphus gryphus d'Orbigny, Voy. Amér. Mérid., Ois., p. 17, 1835—Andes and Patagonian Rio Negro (habits); Darwin, Zool. Beagle, **3**, Birds, p. 1, 1838—Cordilleras of Chile and Patagonia (mouth of Rio Negro; Port Desire; mouth of Rio Santa Cruz); Burmeister, Journ. Orn., **8**, p. 241, 1860—Sierra de Aconquija, Tucumán; Wyatt, Ibis, 1871, p. 382—Páramo de Pamplona, above Vetas, Colombia.

Gryphus cuntur "Dum." Bonaparte, Rev. Mag. Zool., (2), **6**, p. 530, 1854—substitute name for [*S.*] *condor* "Lesson."

Sarcorhamphus gryphus Burmeister, Reise La Plata St., **2**, p. 433, 1861—Sierras de Córdoba and Aconquija; Orton, Ann. Mag. Nat. Hist., (4), **8**, p. 186, 1871—Ecuador (plumages; habits); Sharpe, Cat. Bds. Brit. Mus., **1**, p. 20, 1874 (monog.); Taczanowski, Orn. Pér., **1**, p. 75, 1884—Peru; Oustalet, Miss. Sci. Cap Horn, **6**, p. B. 248, 1891—Rio Gallegos, Patagonia; Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 238, 1910 (range in Argentina); Chapman, Bull. Amer. Mus. N. H., **36**, p. 237, 1917—Almaguer, Colombia; Peters, Bull. Mus. Comp. Zool., **65**, p. 303, 1923—western Rio Negro.

Sarcorhamphus aequatorialis Sharpe, Cat. Bds. Brit. Mus., **1**, p. 21, 1874—Quito, Ecuador (no type extant);[1] Sclater, Proc. Zool. Soc. Lond., 1883, p. 349, pl. 35 (young)—Peru (crit.); Ridgway, Auk, **2**, p. 169, 1885 (plumages;=young).

Sarcorhamphus gryphus gryphus Swann, Syn. List Accip., p. 1, 1919 (range).

Sarcorhamphus gryphus aequatorialis Swann, Syn. List Accip., p. 1, 1919—Ecuador.

Vultur gryphus gryphus Swann, Auk, **38**, p. 357, 1921—near Mérida, Venezuela.

Range.—Andes of western Venezuela (Cordillera of Mérida) and Colombia (excluding the Santa Marta Mountains), south in the mountains to the Straits of Magellan and Tierra del Fuego (Spion), and also on the Atlantic coast of Patagonia south of the Rio Negro.

[1] Based partly on Orton's account of a brown "species" of Condor occurring in the Ecuadorian Andes, partly on a zoo specimen in the brown immature plumage.

Field Museum Collection.—3: Colombia (El Tambo, Cauca, 1); Ecuador (Valle de Yunguilla, Azuay, 1); Argentina (Aconquija, Tucumán, 1).

Genus SARCORAMPHUS Duméril

Sarcoramphus Duméril, Zool. Anal., p. 32, 1806—type, by subs. desig. (Vigors, Zool. Journ., **2**, pp. 381 [footnote], 384, 1825), *Vultur papa* Linnaeus.

Gypagus Vieillot, Anal. Nouv. Orn. Élém., p. 21, April, 1816—type, by subs. desig. (Ridgway, in Baird, Brewer, and Ridgway, Hist. N. Amer. Bds., **3**, p. 337 [note 2], 1874), *Vultur papa* Linnaeus.

Gyparchus Gloger, Hand. Hilfsb. Naturg., **1**, livr. 3, p. 235, 1841 (emendation).

*Sarcoramphus papa (Linnaeus). KING VULTURE.

Vultur papa Linnaeus, Syst. Nat., 10th ed., **1**, p. 86, 1758—based on "*Vultur elegans*" Edwards (Nat. Hist. Bds., **1**, p. 2, pl. 2), and "The Warwouwen" Albin (Nat. Hist. Bds., **2**, p. 4, pl. 4), "in India occidentali"=Surinam (auct. Berlepsch, Nov. Zool., **15**, p. 289, 1908); Schomburgk, Reisen Brit. Guiana, **1**, pp. 464–465, 1847—Pirara (habits; descr. of female).

Gypagus papa Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **36**, p. 456, 1819; Salvadori and Festa, Bull. Mus. Zool. Torino, **15**, No. 368, p. 27, 1900—Gualaquiza and Rio Peripa, Ecuador; Ihering, Cat. Faun. Braz., **1**, p. 81, 1907—São Paulo and Rio Juruá, Amazonas (range); Berlepsch, Nov. Zool., **15**, p. 289, 1908—Cayenne; Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 238, 1910—Tucumán and Salta; Bertoni, Faun. Parag., p. 41, 1914—Alto Paraná, Paraguay; Chapman, Bull. Amer. Mus. N. H., **36**, p. 237, 1917—Cauca and Magdalena rivers, Colombia.

Sarcoramphus papa d'Orbigny, Voy. Amér. Mérid., Ois., p. 28, 1835—Paraguay, Brazil, and Bolivia (habits); Léotaud, Ois. Trinidad, p. 1, 1866—Trinidad; Carriker, Ann. Carnegie Mus., **6**, p. 441, 1910—Costa Rica (Bonilla, Cariblanco de Sarapiquí, Pózo Azúl de Pirrís); Chubb, Bds. Brit. Guiana, **1**, p. 206, 1916—Rupununi River, Great Savannas, Mazaruni River, Berbice, Siparuni, and Barima River; Todd and Carriker, Ann. Carnegie Mus., **14**, p. 141, 1922—Bonda and Minca, Colombia; Swann, Monog. Bds. Prey, **1**, p. 24, 1924 (monog.); Naumburg, Bull. Amer. Mus. N. H., **60**, p. 100, 1930—Matto Grosso (bibliog.); Peters, Bds. World, **1**, p. 190, 1931 (range); Belcher and Smooker, Ibis, 1934, p. 586—Trinidad (not seen since 1913); Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 378, 1936 (full bibliog.; range in Argentina); Harper, Auk, **53**, p. 381, 1936—St. John's River, above Lake George, Florida; Pinto, Rev. Mus. Paul., **22**, p. 58, 1938—São Paulo (São José do Rio Pardo, Valparaiso) and Goyáz (Rio das Almas) (range); Traylor, Field Mus. Nat. Hist., Zool. Ser., **24**, p. 202, 1941—Matamoros, Campeche; Gyldenstolpe, K. Svensk. Vet. Akad. Handl., (3), **22**, p. 25, 1945—Igarape Grande, Rio Juruá, Brazil (var. other Amazon localities); idem, l.c., (3), **23**, p. 46, 1945—Bolivia (Bresta and San Lorenzo, El Beni).

Sarcorhamphus papa Cabanis, in Schomburgk, Reisen Brit. Guiana, **3**, p. 743, 1849; Pelzeln, Orn. Bras., **1**, p. 1, 1867—São Paulo (Itararé, Murun-

gaba), Goyáz (Rio Araguay), Matto Grosso (Jacobina, Caiçara, Engenho do Cap Gama), and Amazonia (Borba, Rio Madeira; Serra Caraumán, Rio Branco), Brazil; Taczanowski, Orn. Pér., **1**, p. 81, 1884—Peru; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 131, 1901—Mexico to Panama; Chapman, Bull. Amer. Mus. N. H., **55**, p. 216, 1926—Esmeraldas, Chongon Hills, and Puná Island, Ecuador; Griscom, l.c., **64**, p. 148, 1932—Guatemala (both coasts); Lehmann, Rev. Acad. Colombiana Cienc., Bogotá, **3**, p. 458, pl. 1, 1940 (gen. acc.).

Gyparchus papa Sclater and Salvin, Ibis, 1859, p. 214—coast region of Central America; Taylor, l.c., 1864, p. 79—eastern Trinidad; Sclater and Salvin, Proc. Zool. Soc. Lond., 1867, p. 189—lower Amazon; iidem, l.c., p. 753—Xeberos, Peru; iidem, l.c., 1873, p. 301—Xeberos and Santa Cruz, Peru.

Cathartes papa Sharpe, Cat. Bds. Brit. Mus., **1**, p. 22, 1874 (monog.).

Range.—Tropical Mexico south through Central and South America (including the Island of Trinidad) to Rio Grande do Sul, Paraguay, Bolivia and northern Argentina (Jujuy, Salta, Tucumán, La Rioja, Chaco, and Santa Fé).[1]

Field Museum Collection.—26: Guatemala, Izabal (Los Amates, 3; Bobos, 1); El Salvador (Rio San Miguel, San Miguel, 1); Panama (Boquerón, Chiriquí, 1; Coiba Island, 4); Colombia (Sierra de Baudo, Choco, 1; Tocagua, Atlantico, 1); British Guiana (Georgetown, 1); Brazil (João Pessõa, Rio Juruá, 1; Lago Grande, Rio Juruá, 1; Piquiatuba, Rio Tapajos, 1; Caxiricatuba, Rio Tapajos, 1); Paraguay (Capitan Bado, Cerro Amambay, 6); Bolivia (Buena Vista, Santa Cruz, 2); Argentina (Concepción, Tucumán, 1).

Genus **CORAGYPS** Geoffroy Saint-Hilaire

Coragyps T. Geoffroy Saint-Hilaire, in Le Maout, Hist. Nat. Ois., p. 66, 1853—type, by monotypy, *Coragyps urubu*=*Vultur urubu* Vieillot=*Vultur atratus* Bechstein.

*Coragyps atratus (Bechstein). BLACK VULTURE.

Vultur atratus Bechstein, Anhang, Band 1, Latham's Allg. Uebers. Vögel, p. 655, 1793—based on "Black Vulture or Carrion Crow" Bartram, Travels North and South Carolina, pp. 152 (descr.), 289, 1791, St. John's River, Florida.

Vultur urubu Vieillot, Hist. Nat. Ois. Amér. Sept., **1**, p. 23, pl. 2, Sept., 1807—Florida and South America (no type specified).

Cathartes foetens Lichtenstein, Verz. Ausgest. Säug. Vögel Zool. Mus. Berlin, p. 30, 1818—based on "Iribú" Azara, Apunt. Hist. Nat. Pax. Parag., **1**, p. 19, No. 2, Paraguay; Wied, Beitr. Naturg. Bras., **3**, (1), p. 58, 1830—Brazil; Pelzeln, Orn. Bras., **1**, p. 1, 1867—Rio de Janeiro and São Paulo.

[1] About the possible former occurrence of the King Vulture (Bartram's *Vultur sacra*) on St. John's River, Florida, in 1774 or 1775, see Harper, Auk, **53**, pp. 381–392, 1936, and McAtee, l.c., **59**, p. 104, 1942.

Cathartes brasiliensis Bonaparte, Consp. Gen. Av., **1**, (1), p. 9, 1850—South America and "Antilles" (no type specified; southern Brazil designated as type locality by Berlepsch, Nov. Zool., **15**, p. 289, 1908).

Catharistes atratus Sharpe, Cat. Bds. Brit. Mus., **1**, p. 24, 1874 (monog.); Taczanowski, Orn. Pér., **1**, p. 84, 1884—Peru.

Catharista atrata Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 133, 1901—Mexico to Panama (bibliog.).

Catharista atratus brasiliensis Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **22**, (3), p. 567, 1906 (crit.); Ihering, Cat. Faun. Braz., **1**, p. 81, 1907—São Paulo (Ypiranga) and Amazonas (Rio Juruá).

Catharista urubu brasiliensis Carriker, Ann. Carnegie Mus., **6**, p. 442, 1910—Costa Rica.

Catharista urubu Chapman, Bull. Amer. Mus. N. H., **36**, p. 238, 1917—Santa Elena, Colombia.

Coragyps urubu Todd and Carriker, Ann. Carnegie Mus., **14**, p. 142, 1922—Bonda, Colombia; Griscom, Bull. Amer. Mus. N. H., **64**, p. 148, 1932—Guatemala.

Coragyps atratus foetens Lönnberg and Rendahl, Ark. Zool., **14**, No. 25, p. 29, 1922—Machangará River, Quito, and Cumbaya, Ecuador; Peters, Bds. World, **1**, p. 190, 1931 (range); Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **19**, p. 292, 1932—Chile (bibliog.); Friedmann, Proc. Biol. Soc. Wash., **46**, p. 187, 1933 (crit.); Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 380, 1936 (range in Argentina; bibliog.); Pinto, Rev. Mus. Paul., **22**, p. 59, 1938 (range in Brazil); Lehmann, Rev. Acad. Colombiana Cienc., Bogotá, **3**, p. 459, pl. 2, fig. b, 1940 (gen. acc.); Murphy, Auk, **62**, p. 116, 1945—Pearl Island, Panama.

Coragyps urubu foetens Swann, Monog. Bds. Prey, **1**, p. 9, 1924—South America (monog.); Chapman, Bull. Amer. Mus. N. H., **55**, p. 217, 1926—Quito, Ecuador (crit.; meas.); Wetmore, Bull. U. S. Nat. Mus., **133**, p. 91, 1926—Chaco (Las Palmas, Resistencia), Formosa (Formosa), Paraguay (west of Puerto Pinasco), Uruguay, etc. (crit.).

Coragyps atratus atratus Bruner, Mem. Soc. Cubana Hist. Nat., **14**, p. 105, 1940—Cuba (status; range).

Coragyps atratus Wetmore, Proc. U. S. Nat. Mus., **89**, p. 530, 1941—highlands of Guatemala; van Rossem, Condor, **45**, p. 121, 1943—Cerralvo Island, Lower California; Brodkorb, Pap. Mich. Acad. Sci., Arts and Letters, **29**, p. 115, 1943 (published 1944) (geog. var.); van Rossem, Occ. Pap. Mus. Zool. Louisiana State Univ., **21**, p. 52, 1945—Sonora (distr.).

Coragyps atratus brasiliensis Brodkorb, Pap. Mich. Acad. Sci., Arts and Letters, **29**, p. 119 (in text), 1943 (birds from tropical America said to be distinct).

Range.—North America, from Kansas, Illinois, Indiana, and Maryland southward through Central and South America (including the island of Trinidad) to Chiloé Island and Llanquihue on the west coast, and to northern Argentina and Uruguay east of the Andes.[1]

[1] We agree with Friedmann (Proc. Biol. Soc. Wash., **46**, pp. 187–189, 1933) that the average smaller size of the South American individuals is not sufficiently constant to warrant their separation as *C. a. foetens*.

Field Museum Collection.—30: Texas (Cameron County, 5); Florida (Amelia Island, 1; Anclote, 1; St. John's River, 1); Mexico (Camoa, Sonora, 1); Guatemala (Los Amates, Izabal, 1); Panama (Port Obaldia, Darien, 1); Colombia (El Tambo, Cauca, 10); British Guiana (Buxton, 2); Bolivia (Aiquile, Cochabamba, 2; Tin-Tin, Cochabamba, 1; Buena Vista, Santa Cruz, 1); Paraguay (265 km. west of Puerto Casado, 2); Argentina (Concepción, Tucumán, 1).

Genus CATHARTES Illiger

Cathartes Illiger, Prodr. Syst. Mamm. Av., p. 236, 1811—type, by subs. desig. (Vigors, Zool. Journ., **2**, p. 384, 1825), *Vultur aura* Linnaeus.

Catharista Vieillot, Anal. Nouv. Orn. Élém., p. 21, April, 1816—type, by subs. desig. (Gray, Cat. Gen. Subgen. Bds., p. 2, 1855), *Vultur aura* Linnaeus.

Rhinogryphus Ridgway, in Baird, Brewer, and Ridgway, Hist. N. Amer. Bds., **3**, p. 343, Jan., 1874—type, by orig. desig., *Vultur aura* Linnaeus.

Catharistes Sharpe, Cat. Bds. Brit. Mus., **1**, p. 23, 1874—emendation of *Catharista* Vieillot.

Oenops Sharpe, Cat. Bds. Brit. Mus., **1**, p. 25, after June 1, 1874—substitute for "*Catharista* et *Cathartes*, auct. recent." (no type specified).

*Cathartes aura teter Friedmann.[1] WESTERN TURKEY VULTURE.

Cathartes aura teter Friedmann, Proc. Biol. Soc. Wash., **46**, p. 188, Oct. 26, 1933—Riverside, California (type in the United States National Museum); van Rossem, Occ. Pap. Mus. Zool. Louisiana State Univ., **21**, p. 52, 1945—Sonora (distr.; disc.).

Cathartes aura septentrionalis (not of Wied) Grinnell, Univ. Calif. Pub. Zool., **32**, p. 106, 1928—Lower California; van Rossem, Trans. San Diego Soc. N. H., **6**, p. 241, 1931—Sonora (Guaymas, Tóbari Bay, El Dóctor, Pesqueira, etc.).

Range.—Austral zone of western North America, from southern British Columbia, central Alberta, Saskatchewan, southern Manitoba, Wisconsin, northern Minnesota, and northwestern Michigan south to southern Lower California, northern Mexico (Sonora, Chihuahua, and Tamaulipas to Jalisco), and east to Texas; winters from California and Nebraska southward.

Field Museum Collection.—13: British Columbia (Victoria, 1; Okanagan, 1); North Dakota (Ramsey County, 1); California (San Diego County, 1); Utah (Cedar City, Iron County, 3); Texas

[1] *Cathartes aura teter* Friedmann: Similar in coloration to *C. a. aura* and *C. a. septentrionalis*, but with the short wing of the former and the long tail of the latter. Wing, 480–528; tail, 252–282 mm.

(Brownsville, 2); Mexico (Samachique, Chihuahua, 2; Serra Torahumore, Chihuahua, 1; Horsetail Falls, Nuevo Leon, 1).

***Cathartes aura septentrionalis** Wied. EASTERN TURKEY VULTURE.

Cathartes septentrionalis Wied, Reise Nord-Amerika, **1**, p. 162 (footnote), 1839—near New Harmony, Indiana (no type preserved); idem, Journ. Orn., **4**, p. 120, 1856—on the Wabash River, near New Harmony, Indiana (full descr.).

Cathartes aura septentrionalis Nelson, Proc. Biol. Soc. Wash., **18**, p. 125, 1909 (crit.); Swann, Monog. Bds. Prey, **1**, p. 14, 1924 (in part); Friedmann, Proc. Biol. Soc. Wash., **46**, p. 188, 1933 (range); Sutton, Auk, **59**, p. 304, 1942—Newfoundland and Labrador; Coles, l.c., **61**, p. 219, 1944—Ohio (nesting in caves).

Range.—Eastern North America, from southern Ontario, New York, Connecticut, New Jersey, Ohio, Indiana, Illinois, and eastern Iowa south through Missouri and Arkansas to Louisiana, the Gulf states and southern Florida; casual in northern Ontario and northern New England, in New Brunswick, and Newfoundland.

Field Museum Collection.—9: Connecticut (New Fairfield, 1; New Milford, 1); Illinois (Henry, Marshall County, 1); North Carolina (Pea Island, Dare County, 1; Raleigh, 2); Florida (Anclote, 1; Enterprise, 2).

***Cathartes aura aura** (Linnaeus). TURKEY VULTURE.

Vultur aura Linnaeus, Syst. Nat., 10th ed., **1**, p. 86, 1758—based principally upon "Tzopilotle S. Aura" Hernandez, Hist. Nov. Hisp., p. 331, type locality as designated by Nelson (Proc. Biol. Soc. Wash., **18**, p. 124, 1905), State of Vera Cruz, Mexico.

Cathartes (Vultur) urbis incola (Ricord MS.) Lesson, Complém. Buffon, 2nd ed., **2**, p. 93, 1840[1]—Haiti (Santo Domingo)[2] (no type extant).

Cathartes burrovianus Cassin, Proc. Acad. Nat. Sci. Phila., 1845, p. 212—near City of Vera Cruz, Mexico (type in the Academy of Natural Sciences, Philadelphia; cf. Stone, Proc. Acad. Nat. Sci. Phila., **51**, p. 31, 1899); Ridgway, Bull. Nutt. Orn. Cl., **5**, p. 83, 1880 (crit.); Nelson, Proc. Biol. Soc. Wash., **18**, p. 124, 1905 (crit.).

Cathartes urbicola Des Murs, Rev. Mag. Zool., (2), **5**, p. 153, 1853—substitute name for *Cathartes urbis incola* (Ricord) Lesson.

[1] The name may have to be quoted from the 8vo edition of the work published in 1838 and 1839. We have not been able to consult this edition.

[2] Though stated by Ricord to be common in the Spanish section, the Turkey Vulture appears to have become extinct on the island of Hispaniola. Ricord also claims to have seen the bird on the banks of the Orinoco and at Port-of-Spain, Trinidad (both localities refer, of course, to *C. a. ruficollis*), as well as in Santiago-de-Cuba, "St. Vincent," "Santa Lucia," and "Dominica."

Cathartes ricordi Des Murs, Rev. Mag. Zool., (2), **5**, p. 153, 1853—substitute name for *Cathartes urbis incola* (Ricord) Lesson.

Cathartes aura Wyatt, Ibis, 1871, p. 382—Santander, Colombia; Sclater and Salvin, Proc. Zool. Soc. Lond., 1879, p. 542—Dept. Antioquia, Colombia; Salvin and Godman, Ibis, 1880, p. 178—Santa Marta, Colombia; Cory, Bds. Bahamas, p. 134, 1880—Andros and Abaco; Robinson, Flying Trip to Tropics, p. 154, 1895—Barranquilla, Honda, and Guaduas, Colombia (eggs descr.); Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 135, 1901—part, Central America, Colombia, and West Indies; Nelson, Proc. Biol. Soc. Wash., **18**, p. 122, 1905 (crit.; meas.; range); Piguet, Mém. Soc. Neuch. Sci. Nat., **5**, p. 806, 1914—Medellin, Colombia; Bond, Bds. W. Ind., p. 60, 1936—Cuba, Isle of Pines, Jamaica, Puerto Rico (introduced), Haiti (extirpated), Bahamas (Andros, Great Bahama, Abaco; extirpated on New Providence).

Oenops aura Sharpe, Cat. Bds. Brit. Mus., **1**, p. 25, 1874—part, Jamaica and Mexico.

Cathartes aura aura Chapman, Bull. Amer. Mus. N. H., **36**, p. 238, 1917—Santa Elena and Puerto Valdivia, Colombia; Todd and Carriker, Ann. Carnegie Mus., **14**, p. 141, 1922—Mamatoco, Santa Marta, Colombia; Swann, Monog. Bds. Prey, **1**, p. 11, 1924 (monog.); Wetmore, Bull. U. S. Nat. Mus., **133**, p. 89, 1926 (crit.); Peters, Bds. World, **1**, p. 190, 1931 (range); Darlington, Bull. Mus. Comp. Zool., **71**, p. 364, 1931—Rio Frio, Magdalena, Colombia; Griscom, Bull. Amer. Mus. N. H., **64**, p. 148, 1932—Guatemala; Dickey and van Rossem, Field Mus. Nat. Hist., Zool. Ser., **23**, p. 95, 1938—El Salvador; Burleigh, Auk, **55**, p. 520, 1938 (records for Cape Sable, Florida); Wetmore, Proc. U. S. Nat. Mus., **89**, p. 531, 1941—Guatemalan highlands.

Cathartes aura meridionalis Swann, Syn. Accip., Part 1, p. 3, Sept. 28, 1921—"Colombia" (type, from Santa Marta, in British Museum examined).

Cathartes aura insularis Swann, Syn. Accip., Part 1, p. 3, Sept. 28, 1921—Cozumel Island, Mexico (type in British Museum examined).

Range.—From central Mexico through Central America to northern and eastern Colombia (Antioquia, Santa Marta,[1] lower Magdalena Valley); Bahama Islands (Andros, Great Bahama, Abaco); Greater Antilles (Cuba, Isle of Pines, Jamaica; introduced into the southwestern portion of Puerto Rico, extirpated in Hispaniola).

Field Museum Collection.—6: Bahama Islands (Abaco, 1; Andros, 1); Mexico, Michoacán (Tancítaro, 1; Santa Catarina, 1); Guatemala (Los Amates, Izabal, 1); Honduras (Tegucigalpa, Tegucigalpa, 1).

*Cathartes aura ruficollis Spix.[2] RED-NECKED TURKEY VULTURE.

[1] We cannot satisfactorily distinguish the type of *C. a. meridionalis* (from Santa Marta) from Mexican specimens, and are therefore inclined to agree with Todd and Wetmore in extending the range of *C. a. aura* to Colombia.

[2] *Cathartes aura ruficollis* Spix: Similar to *C. a. aura*, but blacker throughout; dark brown edges to upper wing coverts and along outer web of secondaries more

Cathartes ruficollis Spix, Av. Spec. Nov. Bras., **1**, p. 2, 1824—interior of Bahía and Piauhy, Brazil (type lost, formerly in Munich Museum; cf. Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **22**, No. 3, p. 567, 1906); Chubb, Bds. Brit. Guiana, **1**, p. 211, 1916—Ituribisi River; Young, Ibis, 1929, p. 4—coastland of British Guiana.

Cathartes aura (not *Vultur aura* Linnaeus) d'Orbigny, Voy. Amér. Mérid., Ois., p. 38, 1834—part, Corrientes; Schomburgk, Reisen Brit. Guiana, **1**, pp. 394, 461, 1847—Pirara (habits); Cabanis, l.c., **3**, p. 742, 1849—British Guiana; Pelzeln, Verh. Zool. Bot. Ges. Wien, **12**, p. 172, 1862 (soft parts); idem, Orn. Bras., **1**, p. 1, 1867—Rio de Janeiro (Forte do São João, Sapitiba), São Paulo (Mattodentro, Ypanemá, Itararé), Paraná (Fachina Velha), and Amazonas (Forte do Rio Branco); White, Proc. Zool. Soc. Lond., 1882, p. 624—Concepción, Misiones; Kerr, Ibis, 1892, p. 143—lower Pilcomayo; Allen, Bull. Amer. Mus. N. H., **5**, p. 148, 1893—Chapada, Matto Grosso; Robinson and Richmond, Proc. U. S. Nat. Mus., **24**, p. 167, 1901—La Guaira, Venezuela; Lowe, Ibis, 1907, p. 555—Margarita Island, Venezuela (soft parts); Ihering, Cat. Faun. Braz., **1**, p. 82, 1907—Ilha de São Sebastião and Piquete, São Paulo; Bertoni, Faun. Parag., p. 41, 1914—Alto Paraná, Paraguay.

Cathartes urubitinga (not *C. urubutinga* Pelzeln) Sclater and Salvin, Proc. Zool. Soc. Lond., 1867, p. 589—south bank (of the Amazon) about 100 miles above the Rio Negro, Brazil (specimen in British Museum examined).

Oenops pernigra Sharpe, Cat. Bds. Brit. Mus., **1**, p. 26, 1874—part, spec. a (type, from "north" [=south] side of the River Amazon, in British Museum examined).

Oenops aura Hagmann, Zool. Jahrb. (Syst.), **26**, p. 18, 1907—Mexiana; Reiser, Denks. Math.-Naturw. Kl. Akad. Wiss. Wien, **76**, p. 88, 1910—Joazeiro, Bahía.

Cathartes aura pernigra Berlepsch, Nov. Zool., **15**, p. 289, 1908—Cayenne; Snethlage, Bol. Mus. Goeldi, **8**, p. 122, 1914—Pará, Marajó (Cambú, São Natal), and Mexiana; Bangs and Penard, Bull. Mus. Comp. Zool., **62**, p. 33, 1918—Paramaribo and Overtoom, Surinam (crit.).

Cathartes aura aura Hartert and Venturi, Nov. Zool., **16**, p. 237, 1909—part, Mocoví, Santa Fé.

restricted or even absent. Besides, dimensions are generally smaller, though occasional individuals are just as large as typical *aura*, as has already been observed by Laubmann. The type of *O. pernigra*, a specimen in high plumage, with mere traces of brown margins to some of the secondaries and wing coverts, is exactly like one from Bahía and another from British Guiana (Ituribisi River). The type is the specimen obtained by A. R. Wallace "on the south bank of the Amazon, about 100 miles above the Rio Negro" (=Rio Solimões) and originally recorded by Sclater and Salvin as *C. urubitinga*. There is nothing to indicate that its head ever was yellow, and *O. pernigra* Sharpe becomes a pure synonym of *C. a. ruficollis*. Compared to *C. a. jota*, the present form may be distinguished by its generally smaller size and especially by the reduction (or even absence) of the dark brown markings to the wing coverts and outer webs of secondaries.

Additional material examined.—British Guiana: Annai, 1; Ituribisi River, 2; unspecified, 2.—Brazil: Forte de Rio Branco, 1; Rio Solimões, 1; Bahía, 3; Joazeiro, Bahía, 1; São Paulo, 3.—Paraguay: Villa Rica, 1.

Cathartes pernigra Cherrie, Sci. Bull., Mus. Brookl. Inst., **2**, p. 336, 1916—Orinoco Valley (Agua Salada de Bolívar, Caicara), Venezuela, and British Guiana (Mashapee, Araby) (crit.).

Cathartes aura perniger Swann, Syn. List Accip., p. 2, 1919 (range).

Cathartes aura ruficollis Swann, Monog. Bds. Prey, **1**, p. 16, 1924 (monog.); Wetmore, Bull. U. S. Nat. Mus., **133**, pp. 88, 89, 1926—Paraguay (west of Puerto Pinasco), Uruguay (San Vicente, Lazcano), and Chaco Argentino (crit.; range); Naumburg, Bull. Amer. Mus. N. H., **60**, p. 102, 1930—Mutúm Cavallo and Utiarity, Matto Grosso; Laubmann, Wiss. Erg. Deuts. Gran Chaco Exp., Vögel, p. 91, 1930—Lapango (Formosa) and Misiones (crit.); Pinto, Rev. Mus. Paul., **22**, p. 59, 1930—São Paulo (Ilha São Sebastião, Piquete, Rio Paraná, Rio de Perús) and Goyáz (Jaraguá); Peters, Bds. World, **1**, p. 191, 1931—Venezuela to Paraguay; Stone and Roberts, Proc. Acad. Nat. Sci. Phila., **86**, p. 371, 1934—Descalvados and Piraputanga, Matto Grosso; Belcher and Smooker, Ibis, 1934, p. 586—Trinidad (breeding); Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 389, 1936 (range in Argentina); Pinto, Rev. Mus. Paul., **20**, p. 59, 1936—Fazenda Thomé Pinto, near Jaraguá, Goyáz; Gyldenstolpe, K. Svensk. Vet. Akad. Handl., (3), **23**, p. 47, 1945—Bolivia (El Consuelo and Bresta, El Beni) (disc.).

Range.—Island of Trinidad, Venezuela, and the Guianas south through Brazil to eastern Bolivia, Paraguay, Uruguay, and eastern Argentina (Misiones, Corrientes, Santa Fé, Formosa and Chaco).

Field Museum Collection.—9: Venezuela (Encontrados, Zulia, 3); Brazil (Rio São Miguel, Goyáz, 1); Bolivia (Rio Yapacani, Santa Cruz, 2); Paraguay (Horqueta, 1; Rosario, 1; 265 km. west of Puerto Casado, 2).

*Cathartes aura jota (Molina).[1] CHILEAN TURKEY VULTURE.

[1] *Cathartes aura jota* (Molina) is rather variable, but may be separated from *ruficollis* by generally larger size and the greater amount of brown (or grayish) markings on wing coverts and secondaries.

Separation of the Falkland Island birds appears impracticable. Of eight Falkland specimens six indeed have the outer web of the secondaries conspicuously and broadly margined with light brownish gray becoming hoary along the edge, and in two or three birds similar markings are also present on the greater wing coverts. Two have these light wing-markings more or less strongly shaded with brownish. In two adults (one from Berkeley Sound, the type locality of *C. falklandica*) the markings are, however, just as dark brown as in specimens from Peru (Arequipa) and Ecuador, whereas in one from Chorillos, near Lima, they are just as conspicuously grayish brown with hoary edge as in any from the Falklands. One each from Beagle Channel, Tierra del Fuego, and Tom Bay (Magellan Straits) can be matched by average Falkland birds, while another adult from Tom Bay has brown edges like Ecuadorian birds. In three skins from Santiago de Chile the grayish-edged type is represented by one, the brown-edged by two individuals. An adult from Choro, Cochabamba, Bolivia (supposedly *C. orbignyi* Sztolcman), is a thoroughly normal individual with dark brown wing-markings. It also seems hardly possible that *C. occipitalis*—based upon a single bird from Huambo—is anything but an individual variation, Salvadori and Festa having recorded a specimen with similarly colored head from the Rio Peripa, Ecuador. Considering

Vulcur [sic] *jota* Molina, Sagg. Stor. Nat. Chile, pp. 265, 343, 1782—Chile.[1]

Cathartes aura (not *Vultur aura* Linnaeus) d'Orbigny, Voy. Amér. Mérid., Ois., p. 38, pl. 1, fig. 3, 1834—part, Patagonia (Rio Negro) and Pacific region from Chiloé to Guayaquil; Darwin, Zool. Beagle, **3**, Bds., p. 8, 1838—Chile and Falkland Islands; Des Murs, in Gay, Hist. Fís. Pol. Chile, Zool., **1**, p. 202, 1847—Copiapó to Chiloé, Chile; Gould, Proc. Zool. Soc. Lond., **27**, p. 93, 1859—Falkland Islands; Sclater, l.c., **28**, p. 383, 1860—Falkland Islands; Abbott, Ibis, 1861, p. 149—Falkland Islands (habits); Sclater and Salvin, Proc. Zool. Soc. Lond., 1867, p. 988—Arequipa, Peru; iidem, Ibis, 1869, p. 284—Hasleyn Cove, Messier Channel; iidem, Proc. Zool. Soc. Lond., 1878, p. 435—Falkland Islands (crit.); Oustalet, Miss. Sci. Cap Horn, **6**, p. B. 6, 1891—Orange Bay and Horn Island, Patagonia; Scott and Sharpe, Rep. Princet. Univ. Exped. Patagonia, **2**, Orn., p. 546, 1915—Patagonia.

Catharista falklandica Sharpe, Ann. Mag. Nat. Hist., (4), **11**, p. 133, Feb., 1873—Falkland Islands (type, from Berkeley Sound, in British Museum examined).

Oenops falklandica Sharpe, Cat. Bds. Brit. Mus., **1**, p. 27, pl. 2, fig. 1, 1874—Berkeley Sound, Falkland Islands.

Rhinogryphus aura Sharpe, Proc. Zool. Soc. Lond., 1881, p. 9—Tom Bay, Magellan Straits; Vallentin, Mem. Proc. Manchester Litt. Phil. Soc., **48**, No. 25, p. 38, 1904—Falkland Islands.

Oenops pernigra (not of Sharpe) Taczanowski, Proc. Zool. Soc. Lond., 1882, p. 47—Huambo, Peru; idem, Orn. Pér., **1**, p. 89, 1884—Peru.

Cathartes falklandicus(*a*) Salvadori, Ann. Mus. Civ. Stor. Nat. Genova, (2), **20**, p. 612, 1900—Keppel Island, Falklands; Scott and Sharpe, Rep. Princet. Univ. Exped. Patagonia, **2**, Orn., p. 551, 1915—southern Chile, Tierra del Fuego, and Falkland Islands; Brooks, Bull. Mus. Comp. Zool., **61**, p. 157, 1917—Falkland Islands.

Cathartes burroviana (not of Cassin) Salvadori and Festa, Boll. Mus. Zool. Torino, **15**, No. 368, p. 27, 1900—part, Rio Peripa, Ecuador.

Cathartes aura falklandicus Swann, Syn. List Accip., p. 2, 1919—Falkland Islands, Patagonia, and Chile; idem, Monog. Bds. Prey, **1**, p. 13, 1924 (monog.).

Cathartes aura jota Swann, Syn. Accip., p. 4, 1921—Falkland Islands, Patagonia, and Chile (north to Concepción); idem, Monog. Bds. Prey, **1**, p. 12, 1924 (monog., excl. of Colombia, except the upper Cauca Valley); Wetmore, Bull. U. S. Nat. Mus., **133**, p. 90, 1926—Straits of Magellan through the Andes of Chile (crit.); Chapman, Bull. Amer. Mus. N. H.,

the somewhat erratic variation in the wing-markings we are inclined to agree with Chapman (Bull. Amer. Mus. N. H., **55**, pp. 217–218, 1926) in uniting the populations of the Falklands and the whole Andean region under *C. a. jota*, but would also refer here, and not to *C. a. ruficollis*, the inhabitants of western Ecuador.

Additional material examined.—Falkland Islands, 10; Beagle Channel, Tierra del Fuego, 1; Tom Bay, Magellan Straits, 2; Corral Valdivia, Chile, 1; Santiago de Chile, 3; La Rioja, 1; Choro, Bolivia, 1; Arequipa, 1; Chorillos, Lima, 1; Monji, Ecuador, 2.

[1] Swann (Syn. Accip., p. 4, 1921) suggests Concepción as type locality.

55, p. 218, 1926—La Plata Island, Ecuador; Peters, Bds. World, **1**, p. 191, 1931 (range excl. of Colombia); Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **19**, p. 291, 1932—Chile (bibliog.); Bullock, Rev. Chil. Hist. Nat., **39**, p. 241, 1935—Isla la Mocha (resident); Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 383, 1936 (bibliog.; range in Argentina); Lehmann, Rev. Acad. Colombiana Cienc., Bogotá, **3**, p. 460, pl. 2, fig. a, 1940 (gen. acc.).

Cathartes perniger (not *Oenops pernigra* Sharpe) Lönnberg and Rendahl, Ark. Zool., **14**, No. 25, p. 29, 1922—Cumbaya, Ecuador.

Cathartes occipitalis Sztolcman, Ann. Zool. Mus. Pol. Hist. Nat., **4**, p. 319, Dec. 1, 1925—Huambo, Peru (type in Warsaw Museum).

Cathartes orbignyi Sztolcman, Ann. Zool. Mus. Pol. Hist. Nat., **4**, p. 322 (in text), Dec. 1, 1925—based on *C. aura* d'Orbigny, Voy. Amér. Mérid., Ois., pl. 1, fig. 3 (specimen lost).

Cathartes aura ruficollis (not of Spix) Chapman, Bull. Amer. Mus. N. H., **55**, p. 217, 1926—Jambeli Island, Las Piñas, Cumbaya, and Ambato, Ecuador.

Cathartes aura falklandica Wetmore, Bull. U. S. Nat. Mus., **133**, p. 90, 1926 (crit.); Peters, Bds. World, **1**, p. 191, 1931 (range).

Range.—From the upper Cauca Valley of Colombia south in the Andes through Ecuador, Peru, Bolivia, Chile, and Argentina to Tierra del Fuego. Also found in the lowlands south of Tarapacá, Chile, and the Rio Negro, Argentina. The Falkland Islands.

Field Museum Collection.—22: Colombia, Cauca (San Antonio, 1; El Tambo, 8); Bolivia (Aiquile, Cochabamba, 4; Colomi, Cochabamba, 5; Vacas, Cochabamba, 1; Capinota, Cochabamba, 1); Chile, Aconcagua (Palmillo, 1; Papudo-Limache, 1).

*Cathartes urubutinga Pelzeln.[1] YELLOW-HEADED TURKEY VULTURE.

Cathartes urubutinga Pelzeln, Sitzungsber. Math.-Naturw. Kl. Akad. Wiss. Wien, **44**, p. 7, 1861—Brazil (type, from Forte do Rio Branco, Amazonas, in Vienna Museum examined); idem, Verh. Zool. Bot. Ges. Wien, **12**, pp. 133, 173, 1862—Sapitiba (Rio de Janeiro), Irisanga (São Paulo) and Forte do Rio Branco, Brazil (soft parts); idem, Orn. Bras., **1**, p. 1, 1867—same localities; Ihering, Rev. Mus. Paul., **3**, p. 82, 1899—São Paulo; idem, Cat. Faun. Braz., **1**, p. 82, 1907—Venezuela (range in Brazil); Snethlage, Bol. Mus. Goeldi, **8**, p. 122, 1914—Marajó, Brazil; Bertoni, Faun. Parag.,

[1] *Cathartes urubutinga* Pelzeln is quite distinct from *C. aura*, its principal characteristics being the fleshy caruncles scattered over the sides and back of the neck; the yellow head with verditer blue to bluish white hind crown, forming a sharply circumscribed dusky patch in dried skins; the predominantly greenish instead of purplish gloss of the plumage; and the lesser development of the ruff.

Additional material examined.—Surinam, 1.—Venezuela: Caicara, Rio Orinoco, 2.—Brazil: Forte do São Joaquim, Rio Branco, 4; Pará, 1; Sapitiba, Rio de Janeiro, 1.—Peru: Chyavetas, 2.—Paraguay: Fort Wheeler, west of Puerto Pinasco, 1.

p. 41, 1914—Paraguay; Stone, Proc. Acad. Nat. Sci. Phila., **80**, p. 154, 1928—Rio Inhangapy, Pará; Laubmann, Wiss. Erg. Deuts. Gran Chaco Exp., Vögel, p. 90, 1930—Lapango, Formosa; Brodkorb, Occ. Pap. Mus. Zool. Univ. Mich., **349**, p. 2, 1937—Caviana Island, Brazil; Pinto, Rev. Mus. Paul., **22**, p. 60, 1938—Rio Pardo, Matto Grosso.

Cathartes urubitinga Sclater, Proc. Zool. Soc. Lond., 1863, p. 224—Surinam (crit.); Berlepsch, Ibis, 1884, p. 437—Angostura, Rio Orinoco, Venezuela (crit.); Hartert and Venturi, Nov. Zool., **16**, p. 236, 1909—Mocoví and Ocampo, Santa Fé (crit.; eggs descr.); Cherrie, Sci. Bull., Mus. Brookl. Inst., **2**, p. 338, 1916—Venezuela (San Mateo de Caicara and Caicara, Orinoco) and British Guiana (Georgetown) (crit.); Swann, Monog. Bds. Prey, **1**, p. 17, 1924 (monog.); Wetmore, Bull. U. S. Nat. Mus., **133**, p. 86, 1926—Chaco (Resistencia, Las Palmas), Formosa (Riacho Pilaga), Uruguay (Lazcano), and Paraguay (west of Puerto Pinasco) (crit.; habits); Peters, Bds. World, **1**, p. 191, 1931 (range); Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 390, 1936 (range in Argentina); Lehmann, Rev. Acad. Colombiana Cienc., Bogotá, **3**, p. 461, pl. 1, 1940 (gen. acc.); Dugand, Caldasia, **1**, No. 3, p. 54, 1941—Vaupes, Colombia.

Cathartes aura (not *Vultur aura* Linnaeus) Sclater and Salvin, Proc. Zool. Soc. Lond., 1867, p. 753—Chyavetas, Peru (specimen examined); iidem, l.c., 1873, p. 301—Chyavetas.

Oenops urubitinga Sharpe, Cat. Bds. Brit. Mus., **1**, p. 28, pl. 2, fig. 2, 1874—Surinam and Peru (Chyavetas); Taczanowski, Orn. Pér., **1**, p. 91, 1884—Chyavetas, Peru.

Cathartes burrovianus (not of Cassin) Gurney, List Diurn. Bds. Prey, p. 4, 1884 (crit.); Berlepsch and Hartert, Nov. Zool., **9**, p. 111, 1902—Caicara, Rio Orinoco, Venezuela (soft parts).

(?)*Cathartes burroviana* Salvadori and Festa, Boll. Mus. Zool. Torino, **15**, No. 368, p. 27, 1900—part, Gualaquiza, Ecuador.

Cathartes aura urubitinga Swann, Syn. List Accip., p. 3, 1919 (range, excl. of Mexico).

Cathartes ruficollis (not of Spix) Swann, Syn. Accip., p. 4, 1921 (chars.; range).

Range.—Northern and eastern Colombia (Santa Marta, Rio Vaupes), southern Venezuela (Orinoco Valley), the Guianas,[1] Brazil (Forte do São Joaquim, Rio Branco; Marajó, Caviana, and Rio Guamá, Pará; Sapitiba and Santo Thomé, Rio de Janeiro; Irisanga, São Paulo; Rio Pardo, Matto Grosso), (?)eastern Ecuador (Gualaquiza), eastern Peru (Chyavetas), Paraguay (west of Puerto Pinasco), northern Argentina (in territories of Chaco and Formosa and province of Santa Fé),[2] Uruguay (Lazcano).

[1] Belcher and Smooker (Ibis, 1934, p. 587) include *C. urubitinga* in the fauna of Trinidad on the basis of sight records.

[2] The record of *C. urubitinga* by White (Proc. Zool. Soc. Lond., 1882, p. 624) from the Sierra de Totoral, Catamarca, probably refers to *Coragyps atratus*. No specimen appears to have been preserved.

Field Museum Collection.—19: Colombia (Magdalena, Santa Marta, 1; Mitú, Rio Vaupes, 1); Venezuela (Encontrados, Zulia, 2; Piacoa, Amacuro Delta, 1); British Guiana (Rockstone, 1; Kartabo, 1; Georgetown, 1); Brazil (Itacoatiara, Rio Amazonas, 3; Lago do Baptista, Amazonas, 4; Caxiricatuba, Rio Tapajos, 1; Piquiatuba, Pará, 1); Paraguay, Chaco (265 km. west of Puerto Casado, 1; 235 km. west on the Riacho Negro, 1).

Genus **GYMNOGYPS** Lesson

Gymnogyps Lesson, Écho du Monde Sav., (2), **6**, col. 1037, Dec. 8, 1842—type, by orig. desig., *Vultur californianus* Shaw.

Pseudogryphus Ridgway, in Baird, Brewer, and Ridgway, Hist. N. Amer. Bds., **3**, p. 337, Jan., 1874—type, by orig. desig., *Vultur californianus* Shaw.

*Gymnogyps californianus (Shaw). CALIFORNIA CONDOR.

Vultur californianus Shaw, in Shaw and Nodder, Natur. Misc., **9**, text to pl. 301, 1798—California=Monterey, (type in British Museum examined); Grinnell, Univ. Calif. Pub. Zool., **38**, p. 265, 1932 (crit.).

Vultur Columbianus Ord, in Guthrie, New Geogr., Hist., Comm. Grammar (2nd Amer. ed.), **2**, p. 315, 1815—based on Lewis and Clark, Travels to source of Missouri River, **2**, p. 183, No. 4, orig. Amer. ed., 1814.

Cathartes vulturinus Temminck, Nouv. Rec. Pl. Col., livr. 6, pl. 31, Jan., 1821—new name for *V. californianus* Shaw (fig. of type).

Oenops californiana Sharpe, Cat. Bds. Brit. Mus., **1**, p. 28, 1874—Monterey, California.

Pseudogryphus californianus Ridgway, in Baird, Brewer, and Ridgway, Hist. N. Amer. Bds., **3**, p. 338, 1874 (monog.); idem, Bull. Nutt. Orn. Cl., **5**, p. 82, 1880 (crit.).

Gymnogyps californianus Grinnell, Univ. Calif. Pub. Zool., **32**, p. 106, 1928—Sierra Juárez and Sierra San Pedro Mártir, Lower California; Peters, Bds. World, **1**, p. 191, 1931 (range); Harris, Condor, **43**, p. 3, col. pl., 1941 (hist. acc. to 1900; bibliog.).

Range.—Coast ranges of California (from San Benito County to Los Angeles County) and northern Lower California (Sierra Juárez and Sierra San Pedro Mártir); formerly north through California to the Columbia River.

Field Museum Collection.—5: California (Monterey, 2; Caplund, 2; San Francisco, 1).

Suborder FALCONES

Superfamily FALCONOIDEA

Family ACCIPITRIDAE. Kites, Hawks, and Allies

Subfamily ELANINAE. White-tailed Kites

Genus ELANUS Savigny

Elanus Savigny, Descr. Égypte, **1**, pp. 69, 97, 1809—type, by monotypy, *Elanus caesius* Savigny=*Falco caeruleus* Desfontaines.

***Elanus leucurus majusculus** Bangs and Penard.[1] NORTHERN WHITE-TAILED KITE.

Elanus leucurus majusculus Bangs and Penard, Proc. New Eng. Zool. Cl., **7**, p. 46, Feb. 19, 1920—San Rafael, California (type in Museum of Comparative Zoology, Cambridge, Mass.); Swann, Syn. Accip., p. 162, 1922 (chars.; range); Grinnell, Univ. Calif. Pub. Zool., **32**, p. 106, 1929—northwestern Lower California; Peters, Bds. World, **1**, p. 193, 1931 (range); Griscom, Bull. Amer. Mus. N. H., **64**, p. 162, 1932—Guatemala; Swann, Monog. Bds. Prey, **2**, p. 269, 1936 (monog.); Bent, Bull. U. S. Nat. Mus., **167**, p. 54, 1937 (life hist.); Hawbecker, Condor, **44**, p. 267, 1942 (life hist.).

Falco melanopterus (not of Daudin) Bonaparte, Journ. Acad. Nat. Sci. Phila., **5**, p. 28, June, 1825—Florida.

Elanus leucurus (not *Milvus leucurus* Vieillot) Sclater, Proc. Zool. Soc. Lond., **25**, p. 201, 1857—Jalapa, Mexico; Sclater and Salvin, Ibis, 1859, p. 220—Guatemala; Ridgway, in Baird, Brewer and Ridgway, Hist. N. Amer. Bds., **3**, p. 198, 1874—part, United States and Central America; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 339, 1874—part, southern United States and Central America; Sumichrast, La Naturaleza, **5**, p. 237, 1881—Mirador and Orizaba, Vera Cruz, Mexico; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 97, 1901—southern United States, Mexico (Jalapa, Orizaba, Mirador) and Guatemala; Phillips, Auk, **28**, p. 73, 1911—Altamira, Tamaulipas, Mexico.

Elanus glaucus Coues, Proc. Acad. Nat. Sci. Phila., 1875, p. 345 (ex Bartram); Sennett, Bull. U. S. Geol. Geog. Surv. Terr., **5**, p. 418, 1879—near Santa Maria, Rio Grande Valley, Texas.

Elanus axillaris leucurus Swann, Syn. List Accip., p. 103, 1920—part, southern United States.

Range.—Breeds locally in the southern United States from California and South Carolina south to northern Lower California, Texas, and Florida; winters south through Central America to the Cauca Valley of Colombia.

[1] *Elanus leucurus majusculus* Bangs and Penard: In coloration like the nominate race, but wing and tail longer and the tail feathers relatively wider. Wing, 315–325; tail, 170–190.

Field Museum Collection.—14: California (Solano County, 2); Texas (Brownsville, 5; Corpus Christi, 1); Florida (Caloosahatchee River, Lee County, 1; Kissimmee River, 1); Colombia, Cauca (El Tambo, Munchique, 1; Popayán, 3).[1]

***Elanus leucurus leucurus** (Vieillot). SOUTHERN WHITE-TAILED KITE.

Milvus leucurus Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **20**, p. "556"= 563, May 30, 1818—based on "Alcon blanco" Azara, No. 36, near San Ignacio, Santa Rosa, and Bobi, also on the banks of the Paraguay between Neembucu and Remolinos, etc., Paraguay; d'Orbigny, Voy. Amér. Mérid., Ois., p. 98, 1835—Buenos Aires and Chile.

Falco dispar Temminck, Nouv. Rec. Pl. Col., livr. 54, pl. 319 (young), Jan., 1825—Brazil (type in Paris Museum); Audubon, Orn. Biog., **4**, p. 367, 1838 (monog.).

Elanus dispar Fraser, Proc. Zool. Soc. Lond., **11**, p. 109, 1843—Chile; Des Murs, in Gay, Hist. Fís. Pol. Chile, Zool., **1**, p. 233, pl. 2, 1847—Chile; Philippi, Anal. Univ. Chile, **31**, p. 245, 1868—central provinces, rare in the south of Chile; Waugh and Lataste, Act. Soc. Sci. Chile, **4**, p. lxxxiv, 1894—Peñaflor, Santiago, Chile; Lataste, Proc. Verb. Soc. Linn. Bordeaux, 1923, p. 167—Malleco, Chile; Housse, Rev. Chil. Hist. Nat., **29**, p. 142, 1925—San Bernardo, Santiago, Chile.

Elanus leucurus Cabanis, in Schomburgk, Reisen Brit. Guiana, **3**, "1848," p. 735, 1849—savannas; Burmeister, Syst. Uebers. Th. Bras., **2**, (1), p. 113, 1855 (descr.; range); Cassin, in Gilliss, U. S. Astr. Exp., **2**, p. 175, 1855—Chile; Schlegel, Mus. Pays-Bas, Milvi, p. 8, 1862—Venezuela (Caracas) and "Haiti," errore; Pelzeln, Reise Novara, Zool., **1**, Vögel, p. 8, 1865—Chile; idem, Orn. Bras., **1**, p. 6, 1867—São Paulo (Itararé, Irisanga) and Amazonas (Forte do São Joaquim, Rio Branco), Brazil; Sclater, Proc. Zool. Soc. Lond., 1867, pp. 330, 338—vicinity of Santiago, Chile; idem and Salvin, l.c., 1869, pp. 160, 252—Conchitas, Buenos Aires, and Lake of Valencia, Carabobo, Venezuela; Reinhardt, Vidensk. Medd. Naturhist. Foren., 1870, p. 65—Lagõa Santa, Minas Geraes (Feb. 18, 1836); Sharpe, Cat. Bds. Brit. Mus., **1**, p. 339, 1874—part, spec. a–e, Demerara, Bahia, and Chile; Durnford, Ibis, 1877, p. 88—Baradero, Buenos Aires; Reed, Anal. Univ. Chile, **49**, p. 559, 1877—Cauquenes, Colchagua, Chile; Holmberg, Natur. Arg., **1**, pp. 56, 95, 1878—Buenos Aires (Baradero, San José de Flores, Zarate) and Salta (Rio de los Horcones, Rio Las Piedras); Doering, in Roca, Inf. Ofic. Exp. Rio Negro, Zool., p. 50, 1881—Pampa (of Argentina); White, Proc. Zool. Soc. Lond., 1882, p. 623—Monte Grande, Buenos Aires; Barrow, Auk, **1**, p. 111, 1884—Concepción del Uruguay, Entre Ríos; Salvin, Ibis, 1886, p. 76—Roraima, British Guiana; Withington, Ibis, 1888, p. 470—Lomas de Zamora,

[1] The four Colombian specimens have wings measuring 309, 321, 309, 316 and tails of 172, 175, 165 (worn) and 170 mm. They were taken in the months of June, October and December. It might be that birds from Santa Marta, Llanos del Meta and northern Venezuela would belong to this race rather than the southern one.

Buenos Aires; Sclater and Hudson, Arg. Orn., **2**, p. 71, 1889—Argentina (habits; nidif.); Frenzel, Journ. Orn., **39**, p. 114, 1891—Córdoba; Holland, Ibis, 1892, p. 204—Est. Espartillar, Buenos Aires; Aplin, l.c., 1894, p. 195—Uruguay; Lane, l.c., 1897, p. 181—Laraquete, Arauco, Chile; Ihering, Rev. Mus. Paul., **3**, p. 363, 1899—São Paulo; Albert, Anal. Univ. Chile, **108**, p. 294, 1901—Chile (monog.); Lillo, Anal. Mus. Nac. Buenos Aires, **8**, p. 205, 1902—Tucumán; Bruch, Rev. Mus. La Plata, **11**, p. 251, 1904—Salta and Jujuy; Lillo, Rev. Letr. Cienc. Soc., **3**, No. 13, p. 63, 1905—Tucumán; Ihering, Cat. Faun. Braz., **1**, p. 97, 1907 (range); Berlepsch, Nov. Zool., **15**, p. 293, 1908 (not yet recorded from French Guiana); Hartert and Venturi, l.c., **16**, p. 240, 1909—Mocoví, Santa Fé, and Tucumán; Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 248, 1910 (range in Argentina); Grant, Ibis, 1911, p. 333—Los Yngleses, Ajó, Buenos Aires; Stone, Proc. Acad. Nat. Sci. Phila., **65**, p. 196, 1913—La Pedrita, Orinoco Delta, Venezuela; Bertoni, Faun. Parag., p. 43, 1914—"Paraguay"; Snethlage, Bol. Mus. Goeldi, **8**, p. 139, 1914—Marajó Island (Pacoval, Fazenda São José do Teso), Brazil; Reed, Av. Prov. Mendoza, p. 21, 1916—La Paz, Mendoza; Chubb, Bds. Brit. Guiana, **1**, p. 270, 1916—Roraima and Savannas; Gibson, Ibis, 1919, p. 511—Cape San Antonio, Buenos Aires (habits); Ambrosetti, El Hornero, **1**, p. 290, 1919—Argentina (habits); Tremoleras, l.c., **2**, p. 17, 1920—Uruguay (Minas, Florida, Durazno, Treinta y Tres, Cerro Largo); Daguerre, l.c., **2**, p. 266, 1922—Rosas, Buenos Aires; Serié and Smyth, l.c., **3**, p. 44, 1923—Santa Elena, Entre Ríos; Giacomelli, l.c., **3**, p. 77, 1923—La Rioja; Pereyra, l.c., **3**, p. 165, 1923—Zelaya, Buenos Aires; Housse, Rev. Chil. Hist. Nat., **28**, p. 48, 1924—Isla La Mocha, Arauco, Chile; Reed, l.c., **29**, p. 190, 1925—Chile (Cerro de Quillota, Teno, Rengo, Camarico, Machalí, Curacautin, Casa Blanca, Malleco, La Ligua, Cordillera de Maule); Ménégaux, Rev. Franç. d'Orn., 1925, p. 285—Mistol Paso, Rio Salado, Santiago del Estero; Wilson, El Hornero, **3**, p. 356, 1926—Venado Tuerto, Santa Fé; Jaffuel and Pirion, Rev. Chil. Hist. Nat., **31**, p. 103, 1927—Marga-Marga Valley, Chile; Bullock, l.c., **33**, p. 198, 1929—Angol, Malleco (winter); Young, Ibis, 1929, p. 13—Abary Creek and Blairmont, British Guiana; Pereyra, El Hornero, **5**, p. 215, 1933—Zelaya, Buenos Aires (nest and eggs); Pinto, Rev. Mus. Paul., **19**, p. 105, 1935—Corupéba, Bahia; Dugand, Rev. Acad. Colomb. Cienc., Bogotá, **4**, p. 396, pl. 1, fig. 6, pl. 3, fig. 18, 1941.

Elanus axillaris leucurus Swann, Syn. List Accip., p. 103, 1920—part, South America; idem, Auk, **38**, p. 363, 1921—Nevados, Mérida, Venezuela.

Elanus leucurus leucurus Swann, Syn. Accip., p. 162, 1922 (range); Wetmore, Bull. U. S. Nat. Mus., **133**, p. 104, 1926—Riacho Salado, Chaco, and Lavalle, Buenos Aires (crit.); Friedmann, Bull. Mus. Comp. Zool., **68**, p. 158, 1927—Concepción, Tucumán; Peters, Bds. World, **1**, p. 193, 1931 (range); Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **19**, p. 285, 1932—Valparaiso (Casa Blanca), Colchagua (Rengo), and Talca (Camarico), Chile; Marelli, El Hornero, **5**, p. 194, 1933—Dorrego, Buenos Aires; Belcher and Smooker, Ibis, 1934, p. 588—Trinidad (Nov. 15; May 22); Roberts, Trop. Agric., **11**, p. 89, 1934—Caroni Swamp, Trinidad (August 3); Swann, Monog. Bds. Prey, **2**, p. 267, 1936 (monog.); Steullet

and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 391, 1936 (bibliog.; range in Argentina); Housse, Rev. Chil. Hist. Nat., **39**, p. 21, 1936—Chile (range and habits); Pinto, Rev. Mus. Paul., **22**, p. 61, 1938—Bahia (Corupéba), São Paulo (Ypiranga), Buenos Aires, and Chile; Dugand, Caldasia, **1**, No. 3, p. 54, 1941—Llanos del Meta and Santa Marta, Colombia.

Range.—Central and southern Chile from Santiago to Cautin; Paraguay; Uruguay; and northern Argentina south to Mendoza, Cordoba, and Buenos Aires; recorded also from Brazil (São Paulo, Minas Geraes, Bahia, Marajó Island, and the Rio Branco); British Guiana; Venezuela (La Pedrita, Orinoco Delta; El Trompillo and Lake Valencia, Carabobo; Merida); Island of Trinidad (three records from the months of May, August, and November)[1] and (?)Colombia (Llanos del Meta and Santa Marta).

Field Museum Collection.—12: Paraguay (195 km. west of Puerto Casado, 1); Argentina (Concepción, Tucumán, 7); Chile (Casa Blanca, Aconcagua, 1; Rengo, Colchagua, 1; Camarico, Talca, 1; Feno, 1).

Subfamily PERNINAE. Honey Buzzards and Swallow-tailed Kites

Genus **ELANOIDES** Vieillot[2]

Elanoides Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **24**, p. 101, Sept. 5, 1819—type, by subs. desig. (Ridgway, in Baird, Brewer, and Ridgway, Hist. N. Amer. Bds., **3**, p. 190, Jan., 1874), "Le Milan de la Caroline"= *Falco furcatus* Linnaeus=*Falco forficatus* Linnaeus.

*Elanoïdes forficatus forficatus (Linnaeus). NORTHERN SWALLOW-TAILED KITE.

Falco forficatus Linnaeus, Syst. Nat., 10th ed., **1**, p. 89, 1758—based on "Swallow tail'd Hawk" Catesby, Nat. Hist. Carolina, **1**, p. 4, pl. 4, Carolina.

Falco furcatus Linnaeus, Syst. Nat., 12th ed., **1**, p. 129, 1766 (same basis).

Nauclerus furcatus Cabanis, Journ. Orn., **2**, Erinnerungsschrift, p. lxxxiv, 1855—Bahia Honda and Ciénaga de Zapata, Cuba; Gundlach, l.c., **19**, p. 370, 1871—Cuba.

[1] The Southern White-tailed Kite has definitely been found breeding in Argentina and Chile. The scattered records from the northern parts of its range (Colombia, Rio Branco, Guiana, Venezuela, and Trinidad) probably refer to winter visitants from the south.

[2] About osteology and affinity, cf. Sushkin, Zool. Anz., **23**, p. 525, 1900.

Nauclerus forficatus Ridgway, Proc. Acad. Nat. Sci. Phila., 1870, p. 144 (nomencl.); Ridgway, in Baird, Brewer, and Ridgway, Hist. N. Amer. Bds., **3**, p. 192, 1874—part, excl. of Central and South America (monog.).

Elanoides furcatus Sharpe, Cat. Bds. Brit. Mus., **1**, p. 317, 1874—part, North America; Sumichrast, La Naturaleza, **1**, p. 237, 1881—Cacoprieto, Oaxaca, Mexico.

Elanoides forficatus Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, p. 181, 1876—part, United States (monog.); (?)Lönnberg and Rendahl, Ark. Zool., **14**, No. 25, p. 42, 1922—Ecuador (near Gualea, Santo Domingo); Rapp, Bd. Banding, Boston, **15**, p. 156, 1944—northeastern United States.

Elanoides forficatus forficatus Swann, Syn. List Accip., p. 95, 1920 (range); idem, Syn. Accip., p. 150, 1922 (range); Barbour, Mem. Nutt. Orn. Cl., **6**, p. 48, 1923—Cuba (irregular visitor); Chapman, Bull. Amer. Mus. N. H., **55**, p. 237, 1926—Bucay, Ecuador (Dec. 7); Peters, Bds. World, **1**, p. 194, 1931 (range); Griscom, Bull. Amer. Mus. N. H., **64**, p. 161, 1932—Guatemala (transient); Swann, Monog. Bds. Prey, **2**, p. 223, 1934 (monog.); Bent, Bull. U. S. Nat. Mus., **167**, p. 44, 1937 (life hist.).

Range.—Breeds locally from northern Minnesota, southern Indiana, and South Carolina to eastern Mexico; winters south of the United States to western Ecuador (Bucay) and the island of Cuba, Greater Antilles.

Field Museum Collection.—23: Georgia (Richmond County, 1); Florida (New River, 1; Fort Pierce, 2; Miami, 1; Marco Island, 1; Maples, 1; Ocklawaha River, 2; Sanford, 1; Lake Kissimmee, 1; Lake Conlin, 1; Everglades, 2; Turner's River, 1; Palm Beach, 2; West Jupiter, 1; Kissimmee River, 1; unspecified, 3); Texas (Lee County, 1).

*Elanoïdes forficatus yetapa (Vieillot).[1] SOUTHERN SWALLOW-TAILED KITE.

[1] *Elanoïdes forficatus yetapa* (Vieillot) is generally distinguishable by having the scapulars and interscapular region mainly dark bottle or olive green, thus lacking the purplish tone so prevalent in the majority of North American birds. However, one specimen from Florida (Old Town) and another from Illinois (Cairo) are not more purplish than *yetapa*, while, on the contrary, one from British Guiana (Demerara) and one from Nanegal, Ecuador (July), have just as much purple on the scapulars as the average specimen from the United States. Yet the fact remains that one never finds the most purplish extreme of *forficatus* anywhere in South America, though single individuals of the two races may not always be distinguishable.

Additional material examined.—Guatemala: Vera Paz, 1.—Nicaragua: San Rafael del Norte, 1.—Panama: Boquete, Chiriquí, 1; Cordillera de Tolé, Veraguas, 1; Calovévora, Veraguas, 1; Lion Hill, 1.—Colombia: Concordia, 1; Puerto Valdivia, 1; Zitaguirá, east slope of eastern Andes, 2.—Venezuela: Escorial, 1; Culata, 1; near Mérida, 1.—Ecuador: Andes, 1; Sarayacu, 1; Jima, 1; Nanegal, 1.—Dutch Guiana: Maroni River, 1.—British Guiana: Bartica, 2; Demerara, 5.—Brazil: Bahia, 1; Rio de Janeiro, 1; Santa Fé, Minas Geraes, 1; Paraná, 1; Chapada, Matto Grosso, 1; Serra da Chapada, Matto Grosso, 2.

Milvus yetapa Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **20**, p. 564, May 30, 1818—based on "Alcon Cola-tixera" Azara, No. 38, Paraguay.

Falco yetapa Wied, Beitr. Naturg. Bras., **3**, (1), p. 141, 1830—Rio de Janeiro (Cabo Frio, Corral de Battuba), Espirito Santo, and Bahia (Caravellas, Rio Ilhéos) (breeding).

Milvus furcatus (not *Falco furcatus* Linnaeus) d'Orbigny, Voy. Amér. Mérid., Ois., p. 100, 1836—Moxos and Chiquitos, Bolivia.

Nauclerus furcatus Cabanis, in Schomburgk, Reisen Brit. Guiana, **3**, p. 735, 1849—British Guiana; Burmeister, Syst. Uebers. Th. Bras., **2**, (1), p. 110, 1855—Nova Friburgo and Serra dos Orgãos, Rio de Janeiro; Léotaud, Ois. Trinidad, p. 30, 1866—Trinidad (visitor); Pelzeln, Orn. Bras., **1**, p. 6, 1867—São Paulo (Ypanemá, Pirahy, Mattodentro, Varge Grande) and Pará, Brazil; Reinhardt, Vidensk. Medd. Naturhist. Foren., 1870, p. 65—Minas Geraes (Sete Lagõas, Mattodentro); Salvin, Ibis, 1872, p. 323—Chontales, Nicaragua; Layard, l.c., 1873, p. 394—Pará, Brazil; Sclater and Salvin, Proc. Zool. Soc. Lond., 1873, p. 303—Chamicuros, Peru; Berlepsch, Journ. Orn., **21**, p. 283, 1873—Blumenau, Santa Catharina; Cabanis, l.c., **22**, p. 229, 1874—Cantagallo, Rio de Janeiro; Taczanowski, Orn. Pér., **1**, p. 137, 1884—Chamicuros, Peru; Goeldi, Ibis, 1903, pp. 495, 498—Rio Capim, Pará.

Elanoides furcatus Sclater and Salvin, Ibis, 1859, p. 220—Cajabón, Guatemala; Owen, Ibis, 1860, p. 240—Tactic, Guatemala (habits); Salvin, Ibis, 1861, p. 148—Vera Paz, Guatemala; Lawrence, Ann. Lyc. Nat. Hist. N. Y., **7**, p. 289, 1861—Panama Railroad; Schlegel, Mus. Pays-Bas, Milvi, p. 5, 1862—Surinam (descr.); Salvin, Proc. Zool. Soc. Lond., 1867, p. 158—Cordillera de Tolé, Veragua; Lawrence, Ann. Lyc. Nat. Hist. N. Y., **9**, p. 132, 1868—Pirrís, Costa Rica; Frantzius, Journ. Orn., **17**, p. 369, 1869—Costa Rica (Aguacate, Quebrada Onda, Cervántes); Salvin, Proc. Zool. Soc. Lond., 1870, p. 216—Calovévora, Veraguas; Wyatt, Ibis, 1871, p. 382—Cachirí, Potreras, and Naránjo, Santander, Colombia; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 317, 1874—part, Central and South America; Boucard, Proc. Zool. Soc. Lond., 1878, p. 45—Naránjo, Costa Rica; Sclater and Salvin, l.c., 1879, p. 541—Concordia and Neche, Colombia; Berlepsch and Ihering, Zeits. Ges. Orn., **2**, p. 171, 1885—Arroio Grande and Linha Pirajá, Rio Grande do Sul; Salvin, Ibis, 1886, p. 76—Bartica Grove, British Guiana; Holmberg, Seg. Censo Rep. Arg., **1**, Aves, p. 507, 1898—Misiones, Argentina; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 95, 1901—part, Central and South America; Goodfellow, Ibis, 1902, p. 222—Santa Domingo, Ecuador; Ménégaux, Bull. Mus. Hist. Nat. Paris, **10**, p. 108, 1904—St. Georges d'Oyapock, French Guiana; Hellmayr, Nov. Zool., **13**, p. 46, 1906—Chaguanas, Trinidad; idem, l.c., **14**, p. 29, 1907—Urucurituba, Rio Tapajóz, Brazil; Bangs, Auk, **24**, p. 290, 1907—Boruca, Costa Rica; Hagmann, Zool. Jahrb. (Syst.), **26**, p. 23, 1907—Mexiana Island, Brazil; Snethlage, Journ. Orn., **56**, p. 22, 1908—Bom Lugar, Rio Purús, Brazil.

Nauclerus forficatus (not *Falco forficatus* Linnaeus) Ridgway, in Baird, Brewer, and Ridgway, Hist. N. Amer. Bds., **3**, p. 192, 1874—part, Central and South America.

Elanoides forficatus Ridgway, Bull. U. S. Geol. Geogr. Surv. Terr., **2**, p. 181, 1876—part, Costa Rica (San José), eastern Peru (head of Huallaga River), and Brazil (monog.); idem, Proc. U. S. Nat. Mus., **10**, p. 592, 1887—Segovia River, Honduras; Richmond, l.c., **16**, p. 521, 1893—Rio Escondido, Nicaragua; Allen, Bull. Amer. Mus. N. H., **5**, p. 148, 1893—Chapada, Matto Grosso; Chapman, l.c., **6**, p. 70, 1894—Trinidad; Phelps, Auk, **14**, p. 366, 1897—San Antonio and Cumanacoa, Bermúdez, Venezuela; Ihering, Ann. Est. Rio Grande do Sul, **16**, p. 140, 1899—Mundo Novo, Rio Grande do Sul; idem, Rev. Mus. Paul., **3**, p. 360, 1899—São Paulo; idem, l.c., **4**, p. 163, 1900—Cantagallo and Nova Friburgo, Rio de Janeiro; idem, Cat. Faun. Braz., **1**, p. 96, 1907—São Paulo, Espirito Santo, and Santa Catharina (Colonia Hansa); Berlepsch, Nov. Zool., **15**, p. 293, 1908—St. Georges d'Oyapock, French Guiana; Beebe, Zoologica (N.Y.), **1**, p. 81, 1909—Rio Guarapiché and La Brea, Orinoco Delta, Venezuela; Lüderwaldt, Zool. Jahrb. (Syst.), **27**, p. 340, 1909—Campo Itatiaya, Brazil; Carriker, Ann. Carnegie Mus., **6**, p. 467, 1910—Costa Rica (Bonilla, El General de Térraba, Cariblanco de Sarapiquí, Turrialba, Guápiles, Juan Viñas); Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 247, 1910—Misiones; Hellmayr, Nov. Zool., **17**, p. 413, 1910—S. Isabel, Rio Preto, Rio Madeira; idem, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **26**, (2), pp. 96, 121, 1912—Pará, Rio Capim, and Mexiana; Dabbene, Bol. Soc. Physis, **1**, p. 247, 1913; idem, l.c., **1**, p. 303, 1914—Santa Ana, Misiones; Bertoni, Faun. Parag., p. 43, 1914—Alto Paraná, Paraguay; Snethlage, Bol. Mus. Goeldi, **8**, p. 137, 1914—Peixe-Boi, Quati-purú, Rio Purús (Bom Lugar), and Maranhão; Chubb, Bds. Brit. Guiana, **1**, p. 262, 1916—Demerara River, Bartica, Waini River, and Aremu River; Ménégaux, Rev. Franç. d'Orn., 1918, p. 289—Villa Lutetia, near San Ignacio, Misiones; Dugand, Rev. Acad. Colomb. Cienc., Bogotá, **4**, p. 395, pl. 3, fig. 13, 1941.

Elanoides forficatus yetapa Chapman, Bull. Amer. Mus. N. H., **36**, p. 249, 1917—Noanamá, San Antonio, Laguneta, Andalucia, and Florencia, Colombia (crit.); Dabbene, El Hornero, **2**, p. 133, 1920—Marco Paz, western Buenos Aires; Swann, Syn. List Accip., p. 95, 1920—Costa Rica to Paraguay; idem, Auk, **38**, p. 363, 1921—Culata, Capás, Escorial, and "Correfos" [=Conejos], Mérida, Venezuela; idem, Syn. Accip., p. 151, 1922 (range; chars.); Chapman, Bull. Amer. Mus. N. H., **55**, p. 237, 1926—Ecuador (Punta Santa Ana, Sabanilla, San José); Kennard and Peters, Proc. Bost. Soc. N. H., **38**, p. 450, 1928—Boquete Trail, Almirante, Panama; Naumburg, Bull. Amer. Mus. N. H., **60**, p. 111, 1930—Rio Roosevelt, Matto Grosso; Peters, Bds. World, **1**, p. 194, 1931 (range); Griscom, Bull. Amer. Mus. N. H., **64**, p. 161, 1932—Finca Sepacuite, Guatemala (breeding); Huber, Proc. Acad. Nat. Sci. Phila., **84**, p. 212, 1932—Eden, Nicaragua (crit.); Griscom, Bull. Mus. Comp. Zool., **72**, p. 312, 1932—Obaldia, Panama; Roberts, Trop. Agric., **11**, p. 89, 1934—Trinidad; Belcher and Smooker, Ibis, 1934, p. 588—Trinidad (no breeding record); Swann, Monog. Bds. Prey, **2**, p. 225, 1934 (monog.); Griscom, Bull. Mus. Comp. Zool., **78**, p. 297, 1935—Panama; Van Tyne, Misc. Pub., Mus. Zool. Univ. Mich., **27**, p. 17, 1935—Uaxactun, Petén, Guatemala; Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 393, 1936—Argentina (Santa Ana and Villa Lutetia, Misiones; Marco

Paz, Buenos Aires; La Cuesta and Rio San Lorenzo, Jujuy); Pinto, Rev. Mus. Paul., **22**, p. 61, 1938—Amazonas (Jauareté), São Paulo (Olympia), Espirito Santo (Pão Gigante), and Santa Catharina (Colonia Hansa); idem, l.c., **23**, p. 506, 1938—Jauareté, Rio Uaupés, Brazil; Gyldenstolpe, K. Svensk. Vetensk. Akad. Handl., (3), **23**, p. 47, 1945—Puerto Salinas, El Beni, Bolivia.

Elanoides forficatus forficatus Bertoni, El Hornero, **3**, p. 279, 1924—Puerto Bertoni, Paraguay.

Range.—Central America, from Guatemala (breeding records from Uaxactun, Petén, and Finca Sepacuite, Vera Paz) south through Nicaragua and Costa Rica to Panama, and the greater part of South America to northern Argentina (Jujuy and Misiones), Paraguay (Puerto Bertoni), and Rio Grande do Sul; casual in western Buenos Aires (Marco Paz).

Field Museum Collection.—31: Honduras (Copan, 2); Nicaragua (San Rafael del Norte, Matagalpa, 2); Costa Rica (Limón, 1); Panama (Port Obaldia, Darien, 1); Colombia (El Tambo, Munchique, Cauca, 10); Peru (Alto Quimire, Chanchamayo, Junín, 2); British Guiana (Mazaruni River, 1; unspecified, 2); Brazil (Igarape Aniba, Amazonas, 4); Paraguay (Capitan Bado, Cerro Amambay, 3; 40 km. west-southwest of the Cerro Amambay, 3).

Genus **LEPTODON** Sundevall

Cymindis (not of Latreille, 1806) (Cuvier MS.) Dumont, Dict. Sci. Nat., **1**, Suppl., p. 89, 1816—type, by monotypy, "petit autour de Cayenne, Buffon, Pl. Enl., pl. 473, *falco cayannensis* Gmel."

Leptodon[1] Sundevall, Vetensk.-Akad. Handl. for 1835, p. 114, 1836—type, by monotypy, "*Falco cayanensis* et *palliatus* auct."

Odontriorchis Kaup, Classif. Säug. Vögel, p. 124, 1844—type, by monotypy, "*cayennensis*"=*Falco cayennensis* Gmelin, p. 269.

Micraëtus Bertoni, Anal. Cient. Parag., **1**, No. 1, p. 156, Jan., 1901—type, by monotypy, *Micraëtus holmbergianus* Bertoni=*Falco palliatus* Temminck.

*Leptodon cayanensis (Latham). CAYENNE KITE.

Falco cayennensis (not of Gmelin, p. 263) Gmelin, Syst. Nat., **1**, (1), p. 269, 1788—based on "Cayenne Falcon" Latham, Gen. Syn. Bds., **1**, (1), p. 59,

[1] It has been claimed that *Leptodon* was previously used by Rafinesque for some genus of mollusks, but such is not the case. Rafinesque (Ann. Gén. Sci. Phys., **5**, p. 295, Sept., 1820) created for the species *Unio leptodon* the subgenus *Leptodea*, which, of course, does not prevent the further use of Sundevall's term for the Cayenne Kite. It appears that nobody except Sherborn (Ind. Anim., sect. sec., p. 3500), who gives the correct spelling of Rafinesque's name, ever consulted the original reference. Authors evidently relied on Scudder (Nomencl. Zool., Supplem. List, p. 185, 1882), in whose work the name is misquoted as "*Leptodon.*"

which, in its turn, rests on "petit autour de Cayenne" Daubenton [Buffon], Pl. Enl., pl. 473, Cayenne; Spix, Av. Spec. Nov. Bras., **1**, p. 13, pl. 8c, 1824—Bahia, Brazil.

Falco cayanensis Latham,[1] Ind. Orn., **1**, p. 28, 1790—same basis.

Asturina cyanopus Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **3**, p. 41, 1816—based on *Falco cayanensis* Latham and "petit autour de Cayenne" Daubenton, Pl. Enl., pl. 473.

Sparvius monachus Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **10**, p. 341, 1817—"Brésil" (descr. of immature; type in coll. of C. J. Temminck).

Falco palliatus (Wied MS.) Temminck, Nouv. Rec. Pl. Col., livr. 35, pl. 204 (=immature bird), June 20, 1823—"Brésil et Guiane"=Rio Peruhype, near Viçosa, southern Bahia, Brazil[2] (type in the Leyden Museum; cf. Schlegel, Mus. Pays-Bas, Pernes, p. 10, No. 7, 1862); Wied, Beitr. Naturg. Bras., **3**, (1), p. 148, 1830—Rio Peruhype, Bahia, Brazil.[3]

Cymindis buteonides Lesson, Traité d'Orn., livr. 1, p. 55, Feb., 1830—new name for *Falco palliatus* Temminck, Pl. Col., pl. 204.

Cymindis cayennensis Lafresnaye, Mag. Zool., **4**, col. 2, pl. 22, 1834 (crit.); Moore, Proc. Zool. Soc. Lond., **27**, p. 52, 1859—San Pedro Mountains, Honduras; Sclater and Salvin, Ibis, 1859, p. 219—Honduras; Lawrence, Ann. Lyc. Nat. Hist. N. Y., **7**, p. 317, 1861—Panama Railroad; idem, l.c., **9**, p. 134, 1868—Gulf of Nicoya, Costa Rica; Sclater and Salvin, Proc. Zool. Soc. Lond., 1868, p. 629—San Esteban, Venezuela; Frantzius, Journ. Orn., **17**, p. 369, 1869—Costa Rica; Salvin, Proc. Zool. Soc. Lond., 1870, p. 216—Bugaba, Chiriquí; Finsch, l.c., p. 556—Trinidad; Sclater and Salvin, l.c., p. 838—Honduras; iidem, l.c., 1873, p. 303—upper Ucayali, Peru.

Pernis cayanensis Kaup, Isis, 1847, col. 346—South America (descr.).

Odontriorchis cayanensis Cabanis, in Schomburgk, Reisen Brit. Guiana, **3**, "1848," p. 736, 1849—forests of British Guiana.

Cymindis cajanensis Burmeister, Syst. Uebers. Th. Bras., **2**, p. 107, 1855—Bahia.

Cymindis cayanensis Sclater, Proc. Zool. Soc. Lond., **28**, p. 289, 1860—Babahoyo, Ecuador; Schlegel, Mus. Pays-Bas, Pernes, p. 9, 1862—Cayenne, Brazil, and Venezuela (Caracas); Léotaud, Ois. Trinidad, p. 34, 1866—Trinidad; Sclater and Salvin, Proc. Zool. Soc. Lond., 1866, p. 198—upper Ucayali, Peru; iidem, l.c., 1867, p. 590—Amazonas; Pelzeln, Orn. Bras., **1**, p. 5, 1868—Mattodentro, São Paulo, Brazil; Reinhardt, Vidensk. Medd. Naturhist. Foren., 1870, p. 66—Lagõa Santa, Minas Geraes.

Leptodon cayennensis Sharpe, Cat. Bds. Brit. Mus., **1**, p. 333, 1874 (monog.); Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, No. 2, p. 153, 1876—

[1] There is no reason under the Rules to reject Latham's term *cayanensis*, which has priority over *A. cyanopus*, *S. monachus*, and *Falco palliatus*.

[2] Cf. Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **12**, p. 456 (footnote 4), 1929.

[3] The type, described and figured by Temminck, is in the Leyden Museum. A cotype is in the American Museum of Natural History (cf. Griscom, Bull. Mus. Comp. Zool., **72**, p. 312, 1932), although Allen (Bull. Amer. Mus. N. H., **2**, p. 268, 1889) failed to find it.

Mexico (Mirador; Tehuantepec), Costa Rica (Old Harbor; Talamanca), and Amazonia (monog.); Gurney, Ibis, 1880, p. 322 (crit.; plumages); Sumichrast, La Naturaleza, **1**, p. 237, 1881—Mexico (Tlacotalpam, Santa Efigenia, Cacoprieto, and Tapanatepec, Oaxaca); Boucard, Proc. Zool. Soc. Lond., 1883, p. 457—Izalam, Yucatan; Salvin, Ibis, 1886, p. 77—Roraima; Zeledón, Anal. Mus. Nac. Costa Rica, **1**, p. 126, 1887—Pózo Azúl de Pirrís and Pirrís de Cartago, Costa Rica; Riker and Chapman, Auk, **7**, p. 161, 1891—Santarem, Brazil; Allen, Bull. Amer. Mus. N. H., **5**, p. 148, 1893—Chapada, Matto Grosso; Chapman, l.c., **6**, p. 71, 1894—Princestown, Trinidad; Salvadori, Boll. Mus. Zool. Torino, **10**, No. 208, p. 20, 1895—Colonia Risso, Paraguay; Ihering, Ann. Est. Rio Grande do Sul, **16**, p. 141, 1899—São Lourenço, Rio Grande do Sul; idem, Rev. Mus. Paul., **3**, p. 362, 1899—São Paulo; idem, l.c., **4**, p. 163, 1900—Cantagallo, Rio de Janeiro; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 100, 1901—Mexico (Tampico; Jalapa; Tonalá, Chiapas, etc.), British Honduras (Orange Walk, Cayo), Guatemala (Escuintla), Honduras, Nicaragua (San Emilio), Costa Rica, and Panama; Berlepsch and Hartert, Nov. Zool., **9**, p. 114, 1902—Caicara, Rio Orinoco; Hartert, l.c., p. 605, 1902—Bulún, Prov. Esmeraldas, Ecuador; Ihering, Cat. Faun. Braz., **1**, p. 97, 1907—São Paulo (Ubatuba, Crystães, Franca), Espirito Santo, Paraná (Ourinho), and Santa Catharina (Colonia Hansa); Bangs, Auk, **24**, p. 290, 1907—Pózo del Rio Grande, Costa Rica; Berlepsch, Nov. Zool., **15**, p. 293, 1908—Cayenne; Carriker, Ann. Carnegie Mus., **6**, p. 468, 1910—Pózo Azúl de Pirrís and Boruca, Costa Rica; Reiser, Denks. Math.-Nat. Kl. Akad. Wiss. Wien, **76**, p. 90, 1910—Pedrinha, Buritĺ, and Santa Philomena, Piauhy; Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 248, 1910—Chaco; Cherrie, Sci. Bull., Mus. Brookl. Inst., **2**, p. 346, 1916—Caicara, Orinoco.

Odontriorchis cayennensis Cabanis, Journ. Orn., **22**, p. 229, 1874—Cantagallo, Rio de Janeiro; Bertoni, Faun. Parag., p. 43, 1914—Alto Paraná, Paraguay.

Cymindis cayenensis Lawrence, Bull. U. S. Nat. Mus., **4**, p. 42, 1876—Santa Efigenia, Tehuantepec, Mexico.

Regerrhinus cayennensis Taczanowski, Orn. Pér., **1**, p. 144, 1884—upper Ucayali, Peru.

Leptodon cayanensis Allen, Bull. Amer. Mus. N. H., **13**, p. 131, 1900—Masinga, Colombia.

Micraëtus holmbergianus Bertoni, Anal. Cient. Parag., **1**, No. 1, p. 156, Jan., 1901—Alto Paraná, Paraguay (type in coll. of A. de W. Bertoni).

Leptodon palliatus Hellmayr, Proc. Zool. Soc. Lond., 1911, p. 1204—Tadó, Pacific Colombia; idem, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **26**, (2), pp. 77, 96, 1912—Rio Acará, Pará; Snethlage, Bol. Mus. Goeldi, **8**, p. 138, 1914—Pará, Marajó (São Natal), and Maranhão; Dabbene, Bol. Soc. Physis, **1**, p. 291, 1916—Loreto, Misiones; Chapman, Bull. Amer. Mus. N. H., **36**, p. 250, 1917—Baudo, Colombia; Swann, Syn. List Accip., p. 101, 1920 (range); Hallinan, Auk, **41**, p. 311, 1924—Gatún, Panama; Dabbene, El Hornero, **3**, p. 394, 1926—Santa Ana, Misiones.

Chondrohierax palliatus Chubb, Bds. Brit. Guiana, **1**, p. 268, 1916—upper Takutu Mountains, Bonasica River, and Roraima.

Odontriorchis palliatus Todd and Carriker, Ann. Carnegie Mus., **14**, p. 144, 1922—Bonda and Cinto, Santa Marta, Colombia; Chapman, Bull. Amer. Mus. N. H., **55**, p. 238, 1926—Ecuador; Peters, Bds. World, **1**, p. 199, 1931 (range); Griscom, Bull. Amer. Mus. N. H., **64**, p. 162, 1932—Hacienda California, Guatemala; idem, Bull. Mus. Comp. Zool., **72**, p. 312, 1932—Permé and Obaldia, Panama; Belcher and Smooker, Ibis, 1934, p. 589—Trinidad; Griscom, Bull. Mus. Comp. Zool., **78**, p. 298, 1935—Panama; Aldrich, Sci. Pub. Cleveland Mus. N. H., **7**, p. 42, 1937—Paracoté, Azuero Peninsula, Panama; Davidson, Proc. Calif. Acad. Sci., (4), **23**, p. 256, 1938—Barriles and near San Felix, Chiriquí, Panama; Dugand, Rev. Acad. Colomb. Cienc., Bogotá, **4**, p. 396, pl. 3, fig. 14, 1941—Colombia.

Odontriorchis palliatus palliatus Swann, Syn. Accip., p. 158, 1922—Brazil and Bolivia (chars.); Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **12**, p. 456, 1929—Buritî and Parnaguá, Piauhy; Naumburg, Bull. Amer. Mus. N. H., **60**, p. 112, 1930—Urucúm, Matto Grosso; Swann, Monog. Bds. Prey, **2**, p. 256, 1934 (monog.); Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 394, 1936—Chaco and Misiones (bibliog.).

Odontriorchis palliatus guianensis Swann, Syn. Accip., Part 3, p. 159, Feb. 16, 1922—near Paramaribo, Surinam (type in Tring Collection, now in the American Museum of Natural History, New York); idem, Monog. Bds. Prey, **2**, p. 257, 1936—Surinam, Guiana, Venezuela, Trinidad, Ecuador, and Brazil north of the Amazon.

Odontriorchis palliatus mexicanus Swann, Syn. Accip., Part 3, p. 159, Feb. 16, 1922—Tampico, Tamaulipas, Mexico (type in British Museum examined); idem, Monog. Bds. Prey, **2**, p. 258, 1936—Mexico to Panama; Brodkorb, Misc. Pub., Mus. Zool. Univ. Mich., **55**, p. 26, 1943 (distinct race).

Range.—Tropical Mexico, from Tamaulipas and Oaxaca south through Central America to Colombia and western Ecuador (Babahoyo) and east of the Andes through the whole of South America (including the Island of Trinidad) to Rio Grande do Sul, Paraguay, and northern Argentina (Chaco and Misiones).[1]

Field Museum Collection.—15: Mexico (Tampico, Tamaulipas, 1; Tutla, Oaxaca, 1); El Salvador (Hacienda Zapotitan, La Libertad,

[1] The color-differences used by Swann for the attempted subdivision of this kite do not exist at all. There is, however, the possibility that the birds from southern Brazil, Argentina and Bolivia may be separable on account of their larger size (wing of adult males, 330–345, of females, 360–362). Specimens from southern Mexico and Central America (*mexicanus*) are absolutely the same as those from Guiana (*cayanensis=guianensis*). If two forms be admitted, the large race of southern Brazil will have to be called *L. c. monachus*. Vieillot's specific term evidently refers to a bird in the same plumage as the one that was subsequently described and figured by Temminck as *F. palliatus*.

Specimens in fully adult plumage have been examined from the following localities: Tampico, Tamaulipas, 2; Jalapa, Vera Cruz, 2; Tonalá, Chiapas, 1; Izalam, Yucatan, 1; Escuintla, Guatemala, 1; Orange Walk, British Honduras, 1; San Emilio, Nicaragua, 1; Miravalles, Costa Rica, 1; Sarayacu, Ecuador, 1; Puerto Cabello, Venezuela, 1; Caparo, Trinidad, 1; Mountains of the Moon, British Guiana, 1; Cayenne, 1; Pará, 1; Buritî, Piauhy, 1; Rio de Janeiro, 1; Ypanemá, São Paulo, 3; Joinville, Santa Catharina, 2; Chapada, Matto Grosso, 2.

1); Colombia (Rio Jurado, Choco, 1; Morelia, Caqueta, 1); British Guiana (Coverden, 1); Brazil (Canutama, Rio Purus, 1; Lago Baptista, Rio Amazonas, 3; Igarape Aniba, Amazonas, 1; Caxiricatuba, Rio Tapajoz, 2; Rio São Miguel, Goyaz, 1); Bolivia (Rio Surutú, Santa Cruz, 1).

Leptodon forbesi (Swann).[1] FORBES'S KITE.

Odontriorchis forbesi Swann, Syn. Accip., Part 3, p. 159, Feb. 16, 1922—Pernambuco, Brazil (type in British Museum examined); Peters, Bds. World, 1, p. 199, 1931—Pernambuco; Swann, Monog. Bds. Prey, 2, p. 258, 1936 (monog.).

Range.—Eastern Brazil (State of Pernambuco).

Genus CHONDROHIERAX Lesson

Chondrohierax Lesson, Écho du Monde Sav., 10e ann., No. 3, col. 61, Jan. 12, 1843—type, by monotypy, *Chondrohierax erythrofrons* Lesson=*Falco uncinatus* Temminck.

Regerhinus Kaup, Mus. Senckenb., 3, p. 262, 1845—type, by orig. desig. and monotypy, [*Falco*] *uncinatus* "Illiger."

***Chondrohierax uncinatus aquilonis** Friedmann.[2] MEXICAN HOOK-BILLED KITE.

Chondrohierax uncinatus aquilonis Friedmann, Journ. Wash. Acad. Sci., 24, p. 314, July 15, 1934—Tamaulipas, Mexico (type in Museum of Comparative Zoology, Cambridge, Mass.).

[1] *Leptodon forbesi* (Swann) differs from the adult plumage of *L. cayanensis* very strikingly by having the axillaries and under wing coverts pure white instead of mostly black; the pileum deep gull gray passing into white on forehead and hindneck (instead of uniform slate gray from base of bill to nape); the sides of the neck white instead of slate gray; by the presence of grayish white apical spots to scapulars and mantle, and of grayish white apical edges to the remiges, these markings increasing in width towards the secondaries; and by the tail being crossed by a single light-colored band, about 60 to 70 mm. in width, nearly white in color, though shaded with smoke gray here and there and freckled all over with minute dusky markings. Besides, the rectrices are much more broadly tipped with white, this apical band being again streaked and freckled with dusky. In *L. cayanensis*, it will be recalled, there are two separate slate gray cross bands from 15 to 25 mm. in width. The third (basal) gray tail band under the upper tail coverts, more or less present in all specimens of *L. cayanensis*, is likewise well developed in the type of *L. forbesi*. Wing, 330; tail, 235.

The unique type, which was secured by W. A. Forbes in the State of Pernambuco, is a bird in very fresh plumage just finishing its molt. The presence of an old worn primary (umber brown with ochraceous apical edge) on both wings and of some dusky brown feathers on the rump suggests its immaturity. While the specimen looks rather different from the ordinary run of *L. cayanensis*, further material is needed to establish the taxonomic status of *L. forbesi* beyond doubt.

[2] *Chondrohierax uncinatus aquilonis* Friedmann: "Males very much darker, especially on the under parts, than *uncinatus*, blackish plumbeous instead of deep

Range.—Central parts of Mexico, in states of Tamaulipas (Tampico), Guanajuato, Vera Cruz (Jalapa), Jalisco, and Michoacan.

Field Museum Collection.—1: Mexico (Apatzingan, Michoacan, 1).

***Chondrohierax uncinatus uncinatus** (Temminck). HOOK-BILLED KITE.

Falco uncinatus (Illiger MS.) Temminck, Nouv. Rec. Pl. Col., livr. 18, pls. 103, 104 (males), Jan., 1822, livr. 20, pl. 115 (female), March, 1822—"depuis les environs de Rio-de-Janeiro jusque vers le nord du Brésil, et dans toute la Guiane" (cotypes, from Brazil,[1] in the Leyden Museum; cf. Schlegel, Mus. Pays-Bas, Pernes, p. 8 [Nos. 1, 2, 5], 1862); Wied, Beitr. Naturg. Bras., **3**, (1), p. 172, 1830—Rio de Janeiro and Bahia.

Falco vitticaudus Wied, Beitr. Naturg. Bras., **3**, (1), p. 178, 1830—Rio de Janeiro and Bahia, Brazil (descr. of young; type now in the American Museum of Natural History, New York; cf. *Leptodon unicinctus* [lapsu] Allen, Bull. Amer. Mus. N. H., **2**, p. 268, 1889).

Cymindis cuculoïdes Swainson, Nat. Hist. Classif. Bds., **2**, p. 209, July 1, 1837—based on *Falco uncinatus* Temminck, Pl. Col., pls. 103, 104.

Daedalion erythrofrons Lesson, Écho du Monde Sav., 9e ann., 2e sém., No. 45, col. 1061, Dec. 11, 1842—San Carlos, El Salvador (descr. of young; type in coll. of R. P. Lesson).

Pernis uncinatus Kaup, Isis, 1847, col. 344 (monog.).

Regerhinus uncinatus Cabanis, in Schomburgk, Reisen Brit. Guiana, **3**, "1845," p. 736, 1849—savannas of British Guiana; Ridgway, Bull. U. S. Geol. Geogr. Surv. Terr., **2**, (2), p. 156, 1876 (monog.); Lawrence, Bull. U. S. Nat. Mus., **4**, p. 43, 1876—Chihuitan and Santa Efigenia, Tehuantepec, Mexico; Gurney, Ibis, 1880, p. 313 (crit.; plumages); Nutting, Proc. U. S. Nat. Mus., **5**, p. 403, 1882—La Palma de Nicoya, Costa Rica; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 102, 1901—Mexico (Buctzotz, Yucatan), Guatemala, Costa Rica (San José, Naránjo, La Palma, Barránca), Panama (Lion Hill), etc.; Berlepsch and Stolzmann, Proc. Zool. Soc. Lond., 1902, (2), p. 43—Garita del Sol, Junín, Peru; Bangs, Proc. New Eng. Zool. Cl., **3**, p. 21, 1902—Boquete, Chiriquí; Berlepsch, Nov. Zool., **15**, p. 293, 1908—Cayenne.

plumbeous, the white ventral bars broader; females similar to the darker, barred, brown 'phase' of *uncinatus* (the ventral bars russet or amber brown). Wing, 279–300, (females) 275–300; tail, 186–210, (females) 191–214; culmen from cere, 29–33½, (females) 30½–33." (Friedmann, l.c.)

Specimens from Chiapas (Tonala) and Oaxaca (Cacoprieto), Mexico, are inseparable from South American birds.—C.E.H.

Our one specimen of this form is darker than a series from Yucatan, but the ventral bars are narrower.—B.C.

[1] As all the three specimens described and figured by Temminck came from Brazil, Friedmann's action (Journ. Wash. Acad. Sci., **24**, p. 317, 1934) in designating the vicinity of Paramaribo, Surinam, as type locality, is inadmissible. We, accordingly, suggest as such Bahía, eastern Brazil, one of the localities of Wied, who supplied Temminck with the bird figured on pl. 103.

Cymindis uncinatus Burmeister, Syst. Uebers. Th. Bras., **2**, p. 108, 1855—Brazil (descr.); Sclater and Salvin, Ibis, 1859, p. 219—Guatemala; Schlegel, Mus. Pays-Bas, Pernes, p. 8, 1862—Brazil, Venezuela (Caracas), and Surinam; Sclater and Salvin, Proc. Zool. Soc. Lond., 1864, p. 369—Panama Railroad; Léotaud, Ois. Trinidad, p. 36, 1866—Trinidad; Pelzeln, Orn. Bras., **1**, p. 5, 1868—Sapitiba (Rio de Janeiro), Goyabeira, Cuyabá (Matto Grosso), Sangrador (Matto Grosso), and below Serra Caraumán (Rio Branco), Brazil; Lawrence, Ann. Lyc. Nat. Hist. N. Y., **9**, p. 134, 1868—San José, Costa Rica; Frantzius, Journ. Orn., **17**, p. 369, 1869—Costa Rica; Finsch, Proc. Zool. Soc. Lond., 1870, p. 557—Trinidad; Sharpe, l.c., 1873, p. 419 (plumages); Sclater and Salvin, l.c., 1879, p. 541—Medellin, Colombia.

Regerhinus (*Cymindis*) *megarhynchus* (Kaup MS.) Des Murs, in Castelnau, Expéd. Amér. Sud, Ois., livr. 17, p. 9, pl. 1, June 30, 1856—Sarayacu, lower Ucayali, Peru (type in Paris Museum examined).

Cymindis pucherani Léotaud, Ois. Trinidad, p. 40, 1866—Trinidad (descr. of melanistic male; type in coll. of A. Léotaud, destroyed by fire); Finsch, Proc. Zool. Soc. Lond., 1870, p. 557 (crit.).

Cymindis boliviensis Burmeister, Proc. Zool. Soc. Lond., 1868, p. 633, pub. Mar., 1869—Santa Cruz de la Sierra, Bolivia (descr. of melanistic male; type in Museo Nacional de Historia Natural, Buenos Aires).

Cymindis vitticaudus Pelzeln, Orn. Bras., **1**, p. 6, 1868—Cuyabá, Matto Grosso (spec. examined;=melanistic male).

Leptodon megarhynchus Sharpe, Cat. Bds. Brit. Mus., **1**, p. 332, 1874—Peru.

Regerhinus megarhynchus Taczanowski, Proc. Zool. Soc. Lond., 1874, p. 550—Amable Maria and Soriano, Peru (plumages); Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, (2), p. 160, 1876 (ex Sharpe); Gurney, Ibis, 1880, p. 318—Peru, Bahia, and Tehuantepec (crit.); Taczanowski, Orn. Pér., **1**, p. 141, 1884—Peru (Amable Maria, Guajango); Salvin and Godman, Biol. Centr.-Amer., Aves, **1**, p. 102, 1901—Mexico, etc.

Leptodon uncinatus Sharpe, Cat. Bds. Brit. Mus., **1**, p. 330, 1874 (monog.); Boucard, Proc. Zool. Soc. Lond., 1878, p. 45—Naránjo, Costa Rica; Sumichrast, La Naturaleza, **1**, p. 237, 1881—Mexico (Uvero, Cosamaloapam, Chihuitan, Santa Efigenia, Cacoprieto, Tonalá); Salvin, Ibis, 1886, p. 77—Camacusa, British Guiana; Allen, Bull. Amer. Mus. N. H., **5**, p. 148, 1893—Chapada, Matto Grosso; Hartert, Nov. Zool., **5**, p. 501, 1898—Paramba, Ecuador; Allen, Bull. Amer. Mus. N. H., **13**, p. 131, 1900—Bonda, Colombia; Ihering, Rev. Mus. Paul., **3**, p. 362, 1899—Iguapé, São Paulo; idem, l.c., **6**, p. 450, 1905—Rio Juruá, Brazil; Berlepsch and Stolzmann, Ornis, **13**, p. 99, 1906—Echarate, near Santa Ana, Urubamba, Peru; Ihering, Cat. Faun. Braz., **1**, p. 97, 1907—São Paulo (Piquete, Iguapé), Espirito Santo, and Rio Juruá; Hellmayr, Nov. Zool., **17**, p. 413, 1910—Calama, Rio Madeira; Reiser, Denks. Math.-Naturw. Kl. Akad. Wiss. Wien, **76**, p. 100, 1910—Miritiba, Maranhão; Carriker, Ann. Carnegie Mus., **6**, p. 468, 1910—Juan Viñas, Costa Rica; Stone, Proc. Acad. Nat. Sci. Phila., **65**, p. 196, 1913—Cariaquito, Venezuela; Cherrie, Sci. Bull., Mus. Brookl. Inst., **2**, p. 345, 1916—Caicara, Orinoco River, Venezuela; Chapman, Bull. Amer. Mus. N. H., **36**, p. 249, 1917—Rio Frio, Colombia.

Cymindis megarhynchus Taczanowski, Proc. Zool. Soc. Lond., 1879, p. 242—Guajango, Peru.

Leptodon megarhynchus Lillo, Rev. Letr. Cienc. Soc., **3**, No. 13, p. 62, 1905—Tafí Viejo, Tucumán; Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 248, 1910—Tafí Viejo.

Regerinus uncinatus Thayer and Bangs, Bull. Mus. Comp. Zool., **46**, p. 145, 1905—Saboga Island, Pearl Archipelago; Peters, Auk, **30**, p. 371, 1913—Camp Mengel, Quintana Roo; Rendahl, Ark. Zool., **13**, No. 4, p. 28, 1920—Pedro Gonzalez Island, Pearl Archipelago.

Chondrohierax uncinatus Chubb, Bds. Brit. Guiana, **1**, p. 267, 1916—Camacusa; Bangs and Penard, Bull. Mus. Comp. Zool., **62**, p. 39, 1918—vicinity of Paramaribo, Surinam; Swann, Syn. Accip., p. 157, 1922 (chars.; range); Chapman, Bull. U. S. Nat. Mus., **117**, p. 60, 1921—Idma, Urubamba, Peru; Lönnberg and Rendahl, Ark. Zool., **14**, No. 25, p. 42, 1922—near Gualea, Ecuador; Dabbene, El Hornero, **3**, p. 394, 1926—La Estrella de Cartago, Costa Rica (crit.); Chapman, Bull. Amer. Mus. N. H., **55**, p. 238, 1926—Esmeraldas and Chone, Ecuador; Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **12**, p. 454, 1929—Miritiba, Maranhão; Naumburg, Bull. Amer. Mus. N. H., **60**, p. 112, 1930—Fort Wheeler, Paraguay, and Urucúm, Matto Grosso; Griscom, l.c., **64**, p. 162, 1932—Hacienda California, Guatemala; Peters, Bds. World, **1**, p. 200, 1931 (range, excl. Island of Grenada); Stone and Roberts, Proc. Acad. Nat. Sci. Phila., **86**, p. 371, 1934—Descalvados, Matto Grosso; Belcher and Smooker, Ibis, 1934, p. 589—Trinidad; Swann, Monog. Bds. Prey, **2**, p. 252, 1934 (monog.); Van Tyne, Misc. Pub., Mus. Zool. Univ. Mich., **27**, p. 17, 1935—Uaxactun, Petén, Guatemala; Pinto, Rev. Mus. Paul., **20**, p. 53, 1936—Fazienda Formiga, Rio das Almas, Goyáz; Dugand, Rev. Acad. Colomb. Cienc., Bogotá, **4**, p. 396, pl. 3, figs. 15 and 19, 1941—Colombia.

Chondrohierax uncinatus megarhynchus Bangs and Noble, Auk, **35**, p. 445, 1918—Bellavista, Peru (crit.; meas.).

Regerhinus uncinatus uncinatus Swann, Syn. List Accip., p. 100, 1920 (chars.; range); idem, Auk, **38**, p. 363, 1921—Escorial, Mérida.

Regerhinus uncinatus megarhynchus Swann, Syn. List Accip., p. 100, 1920—eastern Peru (crit.).

Chondrohierax megarhynchus Swann, Syn. Accip., p. 157, 1922 (range; chars.); Dabbene, El Hornero, **3**, p. 391, 1926—Tafí Viejo and Concepción, Tucumán (plumages; meas.); Peters, Bds. World, **1**, p. 200, 1931 (range); Swann, Monog. Bds. Prey, **2**, p. 254, 1934 (monog.); Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 395, 1936—San Lorenzo, Jujuy (crit.).

Chondrohierax uncinatus uncinatus Todd and Carriker, Ann. Carnegie Mus., **14**, p. 143, 1922—Bonda, Mamatoco, and Chirua, Santa Marta, Colombia; Darlington, Bull. Mus. Comp. Zool., **71**, p. 365, 1931—Rio Frio, Magdalena, Colombia; Griscom, l.c., **78**, p. 298, 1935—Panama; Friedmann, Journ. Wash. Acad. Sci., **24**, p. 311, 1934 (plumages); Traylor, Field Mus. Nat. Hist., Zool. Ser., **24**, p. 202, 1941—Campeche (Matamoros), Yucatan (Chichen Itza); Dugand, Caldasia, **1**, No. 3, p. 55, 1941—Guajira, Colombia; Gyldenstolpe, K. Svensk. Vetensk. Akad. Handl., (3), **23**, p. 47, 1945—Reyes, El Beni, Bolivia (disc.).

Chondrohierax uncinatus immanis Friedmann, Journ. Wash. Acad. Sci., **24**, p. 315, July 15, 1934—Ambato, eastern Ecuador (type in Museum of Comparative Zoology, Cambridge, Mass.); Peters, Bull. Mus. Comp. Zool., **92**, p. 61, 1943 (note on type).

Range.—Southern Mexico (in states of Guerrero, Oaxaca, Chiapas, Campeche and Yucatan) and south through Central and South America (including the Island of Trinidad) to southern Brazil, Paraguay, and northern Argentina (Tucumán).[1]

Field Museum Collection.—18: Mexico (Matamoros, Campeche, 1; Chichen Itza, Yucatan, 7); Nicaragua (San Rafael del Norte, Matagalpa, 1); Colombia (El Tambo, Munchique, Cauca, 3); Ecuador (Lalaya, Pichincha, 1; Lanibarondón, Guayas, 1); Venezuela (Lake Valencia, Carabobo, 2; Orope, Tachira, 1); Brazil (João Pessoa, Rio Juruá, 1).

***Chondrohierax uncinatus mirus** Friedmann.[2] GRENADA HOOK-BILLED KITE.

Chondrohierax uncinatus mirus Friedmann, Journ. Wash. Acad. Sci., **24**, No. 7, p. 313, July 15, 1934—Morne Rouge, Grenada (type in the American Museum of Natural History, New York).

[1] Friedmann has fully discussed the complicated plumages of this species, and a careful study of sixty specimens from the greater part of its range tends to corroborate his conclusions. There can be no doubt whatever that *C. pucherani* and *C. boliviensis* were based upon the melanistic variety of the adult male, and the bird from Cuyabá listed by Pelzeln s.n. *C. vitticaudus* is likewise an individual of this mutation. In the so-called *C. megarhynchus*, with huge, powerful bill, we cannot see anything but an individual variation which has no geographical significance, since these individuals not only spring up throughout the range (we have examined specimens from Tonalá, Chiapas; Cacoprieto, Oaxaca; Sierra of Mérida and Tachira, Venezuela; Sarayacu, eastern Peru; Bahia, Brazil!), but are connected by intermediates with the normal small-billed *uncinatus*. We are, however, quite unable to follow Friedmann's reasoning in rejecting Des Murs's term. If there were an Upper Amazonian form, its name would be *megarhynchus*, with *immanis* as an absolute synonym, both names being based on large-billed individuals from the same faunal area. We find, however, that there is no means of distinguishing such a local race, since equally large birds with even more powerful bills occur in southern Mexico (Cacoprieto, Tehuantepec, and Tonalá, Chiapas), two males from that region having wings of 310 to 315, and bills of 46 to 50 mm.

Additional material examined.—Mexico: Tonalá, Chiapas, 4; Cacoprieto, Oaxaca, 2; Buctzotz, Yucatan, 1; northern Yucatan, 2.—Nicaragua: San Emilio, 5; Rio Grande, 1; Managua, 1.—Costa Rica: Barránca, 1.—Panamá: Veraguas, 1; unspecified, 2.—Colombia: Anolaima, 1; Medellin, 1.—Ecuador: Paramba, 1.—Peru: Sarayacu, lower Ucayali, 1; Garita del Sol, Junín, 1; Echarate, Urubamba, 1; eastern Peru, 3.—Venezuela: Montaña, Sierra of Mérida, 2.—British Guiana: Demerara, 1; Camacusa, 1; unspecified, 1.—Trinidad: unspecified, 2.—Brazil: Serra Caraumán, Rio Branco, 1; Pará, 1; Miritiba, Maranhão, 2; Bahia, 7; Ponte do Rio Guaporé, Matto Grosso, 1; Cuyabá, Matto Grosso, 2; Rio de Janeiro, 2; Colonia Alpina, Rio de Janeiro, 1; unspecified, 6.—Paraguay: Villa Rica, 2.

[2] *Chondrohierax uncinatus mirus* Friedmann: Male similar to the cinnamon-barred variety of the gray phase of *C. u. uncinatus*, but smaller, and with cinnamon-buff to ochraceous-buff, nuchal collar well-developed, and the barring on the

Regerhinus uncinatus (not *Falco uncinatus* Temminck) Cory, Auk, **4**, p. 48, 1887—Grenada; Wells, Proc. U. S. Nat. Mus., **9**, p. 622, 1889—Morne Rouge, Grenada (crit.); Cory, Cat. W. Ind. Bds., p. 98, 1892—Grenada; Clark, Proc. Bost. Soc. N. H., **32**, pp. 243, 305, 1905—Grenada.

Chondrohierax uncinatus Peters, Bds. World, **1**, p. 200, 1931—part, Grenada.

Range.—Island of Grenada, Lesser Antilles.

Field Museum Collection.—3: Lesser Antilles (Island of Grenada, 3).

***Chondrohierax wilsonii** (Cassin). WILSON'S KITE.

Cymindis wilsonii(i) Cassin, Journ. Acad. Nat. Sci. Phila., (n.s.), **1**, p. 21, pl. 7, 1847—near Gibara, Cuba (type in the Academy of Natural Sciences, Philadelphia; cf. Stone, Proc. Acad. Nat. Sci. Phila., **51**, p. 31, 1899); Lawrence, Ann. Lyc. Nat. Hist. N. Y., **7**, p. 257, 1860—Cuba.

Regerhinus uncinatus (not *Falco uncinatus* Temminck) Gundlach, Journ. Orn., **2**, Erinnerungsschr. 8. Jahresvers. Deuts. Orn. Ges. Gotha, p. lxxx, 1855—Cuba (descr.).

Regerhinus wilsonii Gundlach, in Poey, Repert. Hist. Nat. Cuba, **1**, p. 222, 1865—Cuba; idem, Journ. Orn., **19**, p. 360, 1871—Guantanamo, Rio Cauto, and Cienfuegos, Cuba (plumages; habits); Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, (2), p. 159, 1876—Cuba (monog.); Cory, Auk, **4**, p. 47, 1887—Cuba (descr.); idem, Cat. W. Ind. Bds., p. 98, 1892—Cuba.

Leptodon wilsoni Sharpe, Cat. Bds. Brit. Mus., **1**, p. 333, 1874—Cuba.

Regerhinus uncinatus wilsoni Swann, Syn. List Accip., p. 100, 1920—Cuba.

Chondrohierax wilsoni Swann, Syn. Accip., p. 158, 1922—Cuba (chars.); Barbour, Mem. Nutt. Orn. Cl., **6**, p. 47, 1923—eastern Cuba; Peters, Bds. World, **1**, p. 200, 1931—Cuba; Swann, Monog. Bds. Prey, **2**, p. 255, 1934—Cuba.

Range.—Island of Cuba, Greater Antilles.

Field Museum Collection.—2: Cuba (Guantanamo, Santa Clara, 2).

under parts ochraceous-tawny to tawny, with little or no grayish edgings to the bars; female differing from the brown phase of *C. u. uncinatus* by deep fuscous pileum, ochraceous nuchal collar, more tawny barring of the under parts, and tawny edges to the dorsal plumage (Friedmann, Journ. Wash. Acad. Sci., **24**, No. 7, p. 313). Wing, 250, (female) 262–264; tail, 165, (female) 179–183.

The only additional specimen seen, an adult bird marked "male" by the collector, D. W. Smith, closely resembles the gray phase of the female of *uncinatus*, but lacks all trace of the rufous nuchal collar. Size very small: wing, 250; tail, 170. It agrees very well with the description by Lawrence in Wells's paper, of an adult male from Morne Rouge.

C. u. mirus is evidently a well-marked race, although its plumages remain to be determined by a good series of properly sexed specimens.

Subfamily MILVINAE. True Kites

Genus HARPAGUS Vigors[1]

Harpagus Vigors,[2] Zool. Journ., **1**, p. 338, October, 1824—type, by subs. desig. (Gray, List Gen. Bds., p. 4, 1840), *Falco bidentatus* Latham.

Bidens Spix, Av. Spec. Nov. Bras., **1**, p. 15, 1824—type, by subs. desig. (Sharpe, Cat. Bds. Brit. Mus., **1**, p. 360, 1874), *Falco bidentatus* Latham.

Diodon Lesson, Traité d'Orn., livr. 2, p. 95, May, 1830—type, by monotypy, *Diodon brasiliensis* Lesson.

Diplodon Nitzsch, Syst. Pterylog., p. 93, 1840—type, by virtual monotypy, *Falco bidentatus* Latham.

*Harpagus diodon (Temminck). RUFOUS-THIGHED HAWK.

Falco diodon Temminck, Nouv. Rec. Pl. Col., livr. 34, pl. 198 (adult), May, 1823—Brazil[3] (location of type unknown);[4] Wied, Beitr. Naturg. Bras., **3**, (1), p. 138, 1831—Villa Viçoza, Rio Peruhype, Bahia; Schlegel, Mus. Pays-Bas, Falcones, p. 34, 1862—Cayenne and Brazil (descr.).

Bidens cinerascens (*femoralis*) Spix, Av. Spec. Nov. Bras., **1**, p. 15, 1824—Minas Geraes and Rio de Janeiro (type in Munich Museum; cf. Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **22**, (3), p. 572, 1906).

Bidens femoralis Spix, Av. Spec. Nov. Bras., **1**, pl. 8, 1824 (fig. of adult).

Diodon brasiliensis Lesson, Traité d'Orn., livr. 2, p. 95, May, 1830—part, descr. of "male," Brazil (type in Paris Museum).

Harpagus diodon Burmeister, Syst. Uebers. Th. Bras., **2**, (1), p. 102, 1855—Brazil (descr.); Bonaparte, Bull. Soc. Linn. Normandie, **2**, p. 29, 1857—Cayenne; Pelzeln, Verh. Zool. Bot. Ges. Wien, **13**, pp. 630, 635, 1863—Rio Branco and Ypanemá, Brazil (soft parts); idem, Orn. Bras., **1**, p. 5, 1867—Rio Branco and Ypanemá, São Paulo; Reinhardt, Vidensk. Medd. Naturhist. Foren., 1870, p. 67—Minas Geraes (ex Spix); Cabanis, Journ. Orn., **22**, p. 229, 1874—Cantagallo, Rio de Janeiro; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 361, 1874—Bahia; Allen, Bull. Essex Inst., **2**, p. 82, 1876—Santarém, Brazil; Gurney, Ibis, 1881, p. 119—British Guiana (plumages); Berlepsch and Ihering, Zeits. Ges. Orn., **2**, p. 172, 1885—Arroio Grande, Rio Grande do Sul; Riker and Chapman, Auk, **8**, p. 161, 1891—Diamantina (near Santarém), Rio Tapajóz, Pará; Ihering, Ann. Est. Rio Grande do Sul, **16**, p. 141, 1899—Mundo Novo, Rio Grande do Sul; idem, Rev. Mus. Paul., **3**, p. 364, 1899—Santo Amaro, São Paulo;

[1] According to Miller (Condor, **39**, pp. 219–221, 1937), skeletal characters of this form reveal its close kinship to *Accipiter*.

[2] In the absence of information about the actual date of publication of Spix's work, we have preserved the generic name *Harpagus*, in agreement with general custom.

[3] We may accept Villa Viçoza, Rio Peruhype, southern Bahia, as type locality, since Wied is mentioned by Temminck as discoverer of the species.

[4] It is not listed by Schlegel (Mus. Pays-Bas, Falcones, p. 34) among the specimens in the Leiden Museum.

idem, l.c., **4**, p. 163, 1900—Cantagallo, Rio de Janeiro; Goeldi, Ibis, 1903, p. 497—Rio Capim, Pará; Ihering, Cat. Faun. Braz., **1**, p. 98, 1907—Santo Amaro, São Paulo; Berlepsch, Nov. Zool., **15**, p. 293, 1908—Cayenne; Lillo, Apunt. Hist. Nat., **1**, p. 22, 1909—Ledesma, Jujuy; Dabbene, Anal. Mus. Nac. Hist. Nat., **18**, pp. 248, 415, 1910—Jujuy (Ledesma), Misiones (Santa Ana), and Paraguay (Alto Paraná); Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **26**, (2), pp. 77, 96, 1912—Pará and Rio Capim, Pará; Bertoni, Anal. Soc. Cient. Arg., **75**, p. 80, 1913—Iguazu, Misiones; Dabbene, Bol. Soc. Physis, **1**, p. 304, 1914 (range in Argentina); Snethlage, Bol. Mus. Goeldi, **8**, p. 139, 1914—Pará; Bertoni, Faun. Parag., p. 43, 1914—Alto Paraná, Paraguay; Swann, Syn. List Accip., p. 105, 1920—Bahia to Rio Grande do Sul; idem, Syn. Accip., p. 165, 1922 (range); Sztolcman, Ann. Zool. Mus. Pol. Hist. Nat., **5**, p. 123, 1926—Rio Claro, Serra da Esperança, Paraná; Peters, Bds. World, **1**, p. 201, 1931 (range); Swann, Monog. Bds. Prey, **2**, p. 280, 1936 (monog.); Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 399, 1936—Jujuy and Misiones; Pinto, Rev. Mus. Paul., **22**, p. 64, 1938—São Paulo (Santo Amaro) and Minas Geraes (Theophilo Ottoni).

Gampsonyx ranivorus Bertoni, Anal. Cient. Parag., (1), **1**, p. 165, Jan., 1901—Alto Paraná, lat. 25° 40′, Paraguay (type in coll. of A. W. de Bertoni).

Range.—British Guiana (one record), French Guiana (Cayenne), and eastern Brazil, from the Rio Branco and the Rio Purus, through Pará (Pará; Rio Capim; Santarém, Rio Tapajóz) and the eastern states south to Rio Grande do Sul and the adjacent districts of Argentina (Misiones) and Paraguay (Alto Paraná); also recorded from northwestern Argentina (Ledesma, Jujuy).[1]

Field Museum Collection.—10: Brazil (Obidos, Rio Amazonas, 1; Itacoatiara, Rio Amazonas, 4; Labrea, Rio Purus, 1; Monte Alegre, Pará, 2; Piquiatuba, Rio Tapajoz, 1; Blumenau, Santa Catharina, 1).

*Harpagus bidentatus bidentatus (Latham).[2] DOUBLE-TOOTHED HAWK.

Falco bidentatus Latham, Ind. Orn., **1**, p. 38, 1790—based on "Notched Falcon" Latham, Gen. Syn. Bds., Suppl., **1**, p. 34, Cayenne; Temminck, Nouv. Rec. Pl. Col., livr. 7, pls. 38 (adult), 228 (young), Feb., 1821—Brazil and Guiana; Wied, Beitr. Naturg. Bras., **3**, (1), p. 132, 1830—Villa Viçoza, Rio Peruhype, Bahia; Schlegel, Mus. Pays-Bas, Falcones, p. 35, 1862—Brazil and Cayenne (crit.).

Bidens rufiventer Spix, Av. Spec. Nov. Bras., **1**, p. 14, pl. 6 (=adult), 1824—"ad flumen Amazonum" (type in Munich Museum; cf. Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **22**, (3), p. 572, 1906).

[1] *Additional material examined.*—Brazil: Pará, 2; Bahia, 9; Rio de Janeiro, 5; Ypanemá, São Paulo, 2.

[2] This bird evidently is specifically distinct from *H. diodon*, both occurring side by side, at least locally, in Guiana and in Brazil from Pará to Bahia. We have examined specimens of both from Bahia.

Bidens albiventer Spix, Av. Spec. Nov. Bras., **1**, p. 14, pl. 7 (young), 1824—"ad flumen Amazonum" (type lost; cf. Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **22**, (3), p. 572, 1906).

Diodon brasiliensis Lesson, Traité d'Orn., livr. 2, p. 95, May, 1830—part, descr. of young and female, Brazil and Cayenne.

Diodon bidentatus d'Orbigny, Voy. Amér. Mérid., Ois., p. 122, 1836—Santo Corazón, Chiquitos, Bolivia.

Harpagus rufipes Swainson, Nat. Hist. Class. Bds., **2**, p. 213, 1837—based on *Falco bidentatus* Temminck, Nouv. Rec. Pl. Col., pls. 38, 228.

Harpagus bidentatus Tschudi, Faun. Peru., Orn., p. 107, 1846—wood region of Peru; Cabanis, in Schomburgk, Reisen Brit. Guiana, **3**, "1848," p. 734, 1849—wooded parts; Burmeister, Syst. Uebers. Th. Bras., **2**, (1), p. 100, 1855—Brazil; Pelzeln, Verh. Zool. Bot. Ges. Wien, **13**, pp. 630, 635, 1863 (soft parts); Léotaud, Ois. Trinidad, p. 28, 1866—Trinidad; Sclater and Salvin, Proc. Zool. Soc. Lond., 1866, p. 198—upper Ucayali, Peru; iidem, l.c., 1867, pp. 753, 979—Chyavetas and Pebas, Peru; Pelzeln, Orn. Bras., **1**, p. 5, 1867—Matto Grosso (Dourado) and Amazonia (Salto do Girão and Borba, Rio Madeira; Marabitanas, Rio Negro; Manáos); Finsch, Proc. Zool. Soc. Lond., 1870, p. 556—"Trinidad"; Sclater and Salvin, l.c., 1873, p. 303—Rio Javarri, upper Ucayali, Chyavetas, Chamicuros, Santa Cruz, and Pebas, Peru; Taczanowski, l.c., 1874, p. 550—Monterico, Peru; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 362, 1874—Peru (Chyavetas, Chamicuros, upper Ucayali, Rio Javarri), Trinidad, Bogotá, Demerara, and Brazil; Gurney, Ibis, 1881, p. 120 (plumages); Taczanowski, Proc. Zool. Soc. Lond., 1882, p. 47—Huambo, Peru; idem, Orn. Pér., **1**, p. 157, 1884—Peruvian localities; Salvin, Ibis, 1886, p. 77—Bartica Grove, British Guiana; Berlepsch, Journ. Orn., **37**, p. 318, 1889—upper Ucayali, Peru; Goeldi, Ibis, 1897, p. 153—Counany, northern Pará, Brazil; Ihering, Rev. Mus. Paul., **4**, p. 163, 1900—Cantagallo, Rio de Janeiro; Berlepsch and Stolzmann, Proc. Zool. Soc. Lond., 1902, (2), p. 43—Borgoña, Junín, Peru; Ménégaux, Bull. Mus. Hist. Nat. Paris, **10**, p. 108, 1904—Ouanary and Camopi, French Guiana; Berlepsch and Stolzmann, Ornis, **13**, p. 125, 1906—Rio Cadena, Marcapata, Peru; Hellmayr, Nov. Zool., **13**, p. 46, 1906—Chaguanas, Trinidad; idem, l.c., **14**, p. 39, 1907—Obidos; Hagmann, Zool. Jahrb. (Syst.), **26**, p. 23, 1907—Mexiana; Ihering, Cat. Faun. Braz., **1**, p. 98, 1907 (range); Snethlage, Journ. Orn., **56**, pp. 22, 516, 1908—Bom Lugar, Rio Purús, and Itiatúba, Rio Tapajóz, Brazil; Berlepsch, Nov. Zool., **15**, p. 293, 1908—Cayenne; Hellmayr, l.c., **17**, p. 413, 1910—Calama, Rio Madeira; idem, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **26**, (2), p. 121, 1912—Mexiana; Snethlage, Bol. Mus. Goeldi, **8**, p. 140, 1914—Pará, São Sebastião, Marajó, Counany, Rio Tocantins (Cametá), Rio Tapajóz (Itaitúba, Pimental), and Rio Purús (Bom Lugar); Chubb, Bds. Brit. Guiana, **1**, p. 273, 1916 (numerous localities); Bangs and Penard, Bull. Mus. Comp. Zool., **62**, p. 39, 1918—vicinity of Paramaribo and Javaweg, Surinam; Chubb, Ibis, 1919, p. 287—Mirador, near Baños, eastern Ecuador; Chapman, Bull. Amer. Mus. N. H., **55**, p. 238, 1926—part, below San José and Zamora, eastern Ecuador; Dugand, Rev. Acad. Colomb. Cienc., Bogotá, **4**, p. 395, pl. 3, fig. 12, 1941.

Harpagus diodon (not *Falco diodon* Temminck) Sclater, Proc. Zool. Soc. Lond., **25**, p. 261, 1857—Rio Javarri.

Harpagus bidentatus bidentatus Swann, Syn. List Accip., p. 106, 1920 (chars.; range); idem, Syn. Accip., p. 166, 1922 (same); Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **12**, p. 457, 1929—Tury-assú, Maranhão; Naumburg, Bull. Amer. Mus. N. H., **60**, p. 112, 1930—Matto Grosso; Peters, Bds. World, **1**, p. 200, 1931 (range); Belcher and Smooker, Ibis, 1934, p. 589—Trinidad; Swann, Monog. Bds. Prey, **2**, p. 282, 1936 (monog.); Pinto, Rev. Mus. Paul., **19**, p. 107, 1935—Rio Gongogy and Bomfim, Bahia; idem, l.c., **22**, p. 64, 1938—Pará (Utinga, Murutucú), Maranhão (Miritiba), Bahia (Bomfim, Rio Gongogy), and Minas Geraes (Theophilo Ottoni); Gyldenstolpe, K. Svensk. Vetensk. Akad. Handl., (3), **22**, p. 25, 1945—Brazil (João Pessoa and Lago Grande, Rio Juruá; various Amazon localities) (descr.; pls.).

Range.—Island of Trinidad; Venezuela, Colombia east of the eastern Andes, and the Guianas through Amazonian Ecuador, Peru, and Brazil south to central eastern Bolivia (Santa Cruz) and, in the east, to Bahia, Minas Geraes (Theophilo Ottoni), and Rio de Janeiro (Cantagallo, Rio Parahyba).[1]

Field Museum Collection.—21: Colombia (Morelia, Caqueta, 1); Ecuador (Anagumba Mountain, 1; Rio Copataza, Oriente, 1); Peru (Yurimaguas, Loreto, 1; Alto Quimire, Chanchamayo, Junín, 1); British Guiana (Middle Base Camp, Itabu Creek, 1); Brazil (João Pessoa, Rio Juruá, 2; Canutama, Rio Purús, 1; Labrea, Rio Purús, 1; Lago Baptista, Amazonas, 3; Itacoatiara, Rio Amazonas, 1; Obidos, Pará, 2; Monte Alegre, Pará, 1; Caxiricatuba, Rio Tapajoz, 1; Murucutu, Pará, 1; Tury-assú, Maranhão, 1); Bolivia (Rio Surutú, Santa Cruz, 1).

[1] A series of nearly twenty adults from British Guiana wonderfully illustrates the individual variation in the under parts of this hawk, every gradation being represented, from uniform rufous chestnut with at best a few whitish or buffy bars on anal region and thighs to a stage in which the chest is mainly gray with the duller rufous color confined to sides of chest and breast, while the posterior parts are narrowly cross-barred with whitish or dull rufescent on a pale gray ground. To this gray variety belongs an adult male from Bahia, which is even grayer on the abdomen than those from Guiana and almost wholly lacks the rufous on the tibial feathers. Another Bahia bird is very nearly wholly chestnut beneath, excepting, of course, throat and tail coverts. Of four Peruvian adults, two are chestnut-bellied, one is intermediate, and one is just as gray below as the grayest individual from Guiana. Two Sarayacu birds and a Bogotá skin are nearly unmarked rufous below.

Additional material examined.—British Guiana: Camacabra Creek, 1; Bartica, 5; Anarica River, 2; Supenaam, 4; Ituribisi, 2; Mazaruni Station, 2; Bonasika, 1; Abary River, 2; Demerara, 3; unspecified, 3.—Trinidad: Caparo, 1; unspecified, 1.—Venezuela: Montaña Limones, Mérida, 1; La Ortiza, San Cristóbal, Tachira, 1.—Colombia: Bogotá, 1.—Ecuador: Sarayacu, 3; Mirador, Baños, 1.—Peru: Pebas, 1; Chamicuros, 1; Chyavetas, 2; upper Ucayali, 2; Rio Javarri, 1.—Brazil: Obidos, 1; Bahia, 5; Rio de Janeiro, 1.

***Harpagus bidentatus fasciatus** Lawrence.[1] NORTHERN DOUBLE-TOOTHED HAWK.

Harpagus fasciatus Lawrence, Proc. Acad. Nat. Sci. Phila., for Dec., 1868, p. 429, pub. 1869—Guatemala (type in coll. of Geo. N. Lawrence, now in the American Museum of Natural History, New York); Salvin, Ibis, 1870, p. 115 (crit.); Sharpe, Cat. Bds. Brit. Mus., **1**, p. 363, 1874 (descr.); Gurney, Ibis, 1881, p. 123 (crit.); Sumichrast, La Naturaleza, **5**, p. 237, 1881—Potrero (Vera Cruz) and Santa Efigenia and Cacoprieto (Oaxaca), Mexico; Nutting, Proc. U. S. Nat. Mus., **6**, p. 377, 1883—San Juan del Sur, Nicaragua; idem, l.c., p. 389, 1884—Sucuyá, Nicaragua; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 106, 1901—Mexico (Potrero, Santa Efigenia, Cacoprieto), Guatemala (Vera Paz), Nicaragua (La Libertad, Chontales, San Juan del Sur, Sucuyá), Costa Rica (Miravalles), and Panama (Davíd, Chiriquí; Railroad line); Bangs, Proc. New Eng. Zool. Cl., **3**, p. 21, 1902—Bugaba, Chiriquí; Carriker, Ann. Carnegie Mus., **6**, p. 469, 1910—Costa Rica (Escazú, Guácimo, Banana River, Cuábre de Talamanca); Griscom, Bull. Amer. Mus. N. H., **64**, p. 163, 1932—Guatemala; Dickey and van Rossem, Field Mus. Nat. Hist., Zool. Ser., **23**, p. 106, 1938—Volcan de Conchagua, El Salvador.

Harpagus bidentatus (not *Falco bidentatus* Latham) Sclater and Salvin, Ibis, 1859, p. 219—Guatemala; Lawrence, Ann. Lyc. Nat. Hist. N. Y., **7**, p. 317, 1861—Panama Railroad; Sclater and Salvin, Proc. Zool. Soc. Lond., 1864, p. 369—Panama Railroad; Berlepsch and Taczanowski, l.c., 1883, p. 574—Chimbo, Ecuador; Hartert, Nov. Zool., **5**, p. 502, 1898—Chimbo; Chapman, Bull. Amer. Mus. N. H., **36**, p. 250, 1917—Dabeiba, Bagado, Cisneros, and Puerto Valdivia (lower Cauca), Colombia; Stone, Proc. Acad. Nat. Sci. Phila., **70**, p. 250, 1918—Gatún, Panama; Todd and Carriker, Ann. Carnegie Mus., **14**, p. 145, 1922—Cantilito, Las Vegas, Mamatoco, La Tigrera, and Pueblo Viejo, Colombia (crit.); Lönnberg and Rendahl, Ark. Zool., **14**, No. 25, p. 42, 1922—Niebli, near Gualea, and road to Gualea, Ecuador; Chapman, Bull. Amer. Mus. N. H., **55**, p. 238, 1926—part, Rio de Oro, western Ecuador.

Harpagus bidentatus fasciatus Swann, Syn. List Accip., p. 106, 1920; idem, Syn. Accip., p. 166, 1922 (chars.; range); Peters, Bds. World, **1**, p. 200, 1931 (range); idem, Bull. Mus. Comp. Zool., **71**, p. 309, 1931—Almirante and Changuinola, Panama; Griscom, l.c., **72**, p. 313, 1932—Permé and Obaldia, Darien; idem, l.c., **78**, p. 298, 1935—Panama; Swann, Monog. Bds. Prey, **2**, p. 283, 1936 (monog.).

[1] *Harpagus bidentatus fasciatus* Lawrence is a well-characterized form, differing even from the most strongly barred individuals of the nominate race by the much broader barring extending up to the foreneck. The dark bars are either rufous or dusky or composed of these two colors. West Ecuadorian birds are unquestionably referable to *fasciatus* and not to *bidentatus*. An adult from Gualea, with parti-colored barring underneath, is exactly like one from Chiriquí, while one from Bulún, with mostly gray chest and dark gray bars, is matched by one from Vera Paz, Guatemala.

Additional material examined.—Mexico: Cacoprieto (Tehuantepec), Oaxaca, 1; Vera Cruz, 1.—Guatemala: Vera Paz, 2.—Nicaragua: La Libertad, Chontales, 1.—Costa Rica: Miravalles, 2; Pirrís, 1; unspecified, 1.—Panama: Chiriquí, 2; Veraguas, 3; Lion Hill, 1.—Ecuador: near Gualea, 1; Bulún, Prov. Esmeraldas, 2.

Harpagus bidentatus bidentatus Darlington, Bull. Mus. Comp. Zool., **71**, p. 365, 1931—Rio Frio, Magdalena, Colombia; Huber, Proc. Acad. Nat. Sci. Phila., **84**, p. 213, 1932—Eden, Nicaragua.

Range.—Southeastern Mexico (Potrero, Vera Cruz; Santa Efigenia and Cacoprieto, Oaxaca) south through Guatemala (Vera Paz), El Salvador (Volcan de Conchagua), Nicaragua (La Libertad, Chontales; San Juan del Sur; Sucuyá, etc.), Costa Rica, and Panama to Colombia (west of the eastern Andes) and western Ecuador.

Field Museum Collection.—5: Nicaragua (San Rafael del Norte, Matagalpa, 2); Costa Rica (Villa Quesada, Alajuela, 1); Colombia, Cauca (El Tambo, Rio Munchique, 1; Rio Michengue, 1).

Genus **ICTINIA** Vieillot[1]

Ictinia Vieillot, Anal. Nouv. Orn. Élém., p. 24, Apr., 1816—type, by monotypy, "Milan-Cresserelle" Vieillot=*Falco plumbeus* Gmelin.

Nertus Boie, Isis, 1828, col. 314—type, by subs. desig. (Gray, Cat. Gen. Subgen. Bds., p. 6, 1855), *Falco plumbeus* Gmelin.

Poecilopteryx Kaup, Mus. Senckenb., **3**, p. 258, 1845—type, by monotypy, *Falco plumbeus* Gmelin.

*Ictinia misisippiensis (Wilson). MISSISSIPPI KITE.

Falco misisippiensis Wilson, Amer. Orn., **3**, p. 80, pl. 25, fig. 1, 1811—a few miles below Natchez, Mississippi (type now in the Academy of Natural Sciences, Philadelphia; cf. Stone, Proc. Acad. Nat. Sci. Phila., 1899, p. 11).

Falco ophiophagus Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **11**, p. 103, 1817—United States (location of type not stated).

Ictinia ophiophaga Vieillot and Oudart, Gal. Ois., **1**, (1), p. 44, pl. 17, 1820.

Ictinia mississippiensis Salvin, Ibis, 1861, p. 355—Coban, Guatemala; Baird, Brewer, and Ridgway, Hist. N. Amer. Bds., **3**, p. 203, 1874 (monog.); Sharpe, Cat. Bds. Brit. Mus., **1**, p. 365, 1874 (descr.); Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 104, 1901—United States to Texas and Guatemala; Swann, Syn. List Accip., p. 105, 1920; idem, Syn. Accip., p. 165, 1922 (range); Griscom, Bull. Amer. Mus. N. H., **64**, p. 163, 1932—Coban, Guatemala.

Ictinia mississipensis Schlegel, Mus. Pays-Bas, Milvi, p. 10, 1862—Louisiana and Ohio (crit.).

Ictinia subcoerulea Coues, Proc. Acad. Nat. Sci. Phila., 1875, p. 345—Florida (ex Bartram); Sennett, Bull. U. S. Geol. Geog. Surv. Terr., **4**, (1), p. 42, 1878—lower Rio Grande, Texas (habits).

Ictinia misisippiensis Peters, Bds. World, **1**, p. 201, 1931 (range); Swann, Monog. Bds. Prey, **2**, p. 278, 1936 (monog.); Bent, Bull. U. S. Nat. Mus.,

[1] For osteology and affinity, cf. Sushkin, Zool. Anz., **23**, p. 527, 1900.

167, p. 63, 1937 (life hist.; range); Sutton, Condor, **41**, p. 41, 1939—western Oklahoma (nesting habits; food; etc.).

Ictinia plumbea misisippiensis Sutton, Wilson Bull., **56**, p. 7, 1944 (race of *I. plumbea*).

Range.—Breeds from northeastern Kansas, southern Indiana, southern Illinois, and South Carolina south to Texas and Florida; winters in Florida and southern Texas. Casual in Iowa, Mexico (Tampico, May 17, 1888), and Guatemala (Coban, Vera Paz). Two records for Paraguay.

Field Museum Collection.—17: Texas (Matagorda, 2; Jefferson County, 1; Lee County, 1); Kansas (Sun City, Barber County, 1); Mississippi (Panola County, 1; Rosedale, 2); Georgia (Augusta, 1; Richmond County, 3); Florida (Old Town, Dixie County, 1; Oklawaha River, Marion County, 1; Wakulla, Wakulla County, 1); Paraguay (Colonia Nueva Italia, near Villeta, 2).[1]

*Ictinia plumbea (Gmelin). PLUMBEOUS KITE.

Falco plumbeus Gmelin, Syst. Nat., **1**, (1), p. 283, 1788—based on "Spotted-tailed Hobby" Latham, Gen. Syn. Bds., **1**, (1), p. 106, Cayenne (type in coll. of Miss Blomefield); Temminck, Nouv. Rec. Pl. Col., livr. 31, pl. 180, Feb., 1823—Brazil, Guiana, etc.; Spix, Av. Bras. Nov. Spec., **1**, p. 12, pl. 8b, 1824—Prov. of Rio de Janeiro, Piauhy, etc., Brazil; Wied, Beitr. Naturg. Bras., **3**, (1), p. 126, 1830—Barra do Juçu, Espirito Santo, Brazil.

Milvus cenchris Vieillot, Hist. Nat. Ois. Amér. Sept., **1**, p. 38, pl. 10, 1807—new name for *Falco plumbeus* Gmelin.

Ictinia plumbea Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **16**, p. 76, 1817 (descr.); d'Orbigny, Voy. Amér. Mérid., Ois., p. 101, 1836—Moxos and Chiquitos, Bolivia; Tschudi, Unters. Faun. Peru., Orn., p. 112, 1846—wooded region of Peru; Cabanis, in Schomburgk, Reisen Brit. Guiana, **3**, "1848," p. 735, 1849—coastal forests; Burmeister, Syst. Uebers. Th. Bras., **2**, (1), p. 104, 1855—Rio de Janeiro (Nova Friburgo, Rio da Pomba, Rio Parahybuna); Sclater, Proc. Zool. Soc. Lond., **23**, p. 134, 1855—Bogotá and Santa Marta, Colombia; Schlegel, Mus. Pays-Bas, Milvi, p. 10, 1862—Cayenne, "Haiti" (errore), Surinam, and Brazil (crit.); Léotaud, Ois. Trinidad, p. 42, 1866—Trinidad; Pelzeln, Orn. Bras., **1**, p. 6, 1867—Rio de Janeiro (Cachoeirinha), São Paulo (Ypanemá, Mattodentro), Goyáz (Araguay), and Matto Grosso (São Vicente, Caiçara); Salvin, Proc. Zool. Soc. Lond., 1867, p. 158—Santa Fé, Veraguas; Sclater and Salvin, l.c., 1867, pp. 590, 753—Pará, Brazil, and Chyavetas, Peru; iidem, l.c., 1868, p. 169—Venezuela; Salvin, l.c., 1870, p. 216—Calovévora and Calóbre, Veraguas; Reinhardt, Vidensk. Medd. Naturhist. Foren.,

[1] These two specimens, both absolutely typical of *misisippiensis* in every respect, were received from a Paraguayan collector, Pedro Willim, who stated in a letter that these hawks arrived near Villeta nearly every year between October and February. They were seen in small lots only.—B.C.

1870, p. 65—Lagõa Santa, Minas Geraes; Sclater and Salvin, Proc. Zool. Soc. Lond., 1873, p. 303—Peru (Chyavetas, Santa Cruz, Yurimaguas); Cabanis, Journ. Orn., **22**, p. 229, 1874—Cantagallo, Rio de Janeiro; Taczanowski, Proc. Zool. Soc. Lond., 1874, p. 552—Amable Maria, Peru; idem, l.c., 1877, p. 329—Lechugal, Tumbez, Peru; Sclater and Salvin, l.c., 1879, pp. 541, 638—Concordia and Remedios, Colombia, and Tilotilo, Yungas, Bolivia; Salvin and Godman, Ibis, 1879, p. 206—Manaure, Colombia; Sumichrast, La Naturaleza, **5**, p. 237, 1881—Uvero, Vera Cruz, and Chimalapa, Mexico; Berlepsch and Taczanowski, Proc. Zool. Soc. Lond., 1883, p. 574—Chimbo, Ecuador; Taczanowski, Orn. Pér., **1**, p. 138, 1884—Peru (Amable Maria, Lechugal, Santa Cruz, Yurimaguas); Berlepsch and Ihering, Zeits. Ges. Orn., **2**, p. 172, 1885—Rio Grande do Sul (Taquara, Arroio Grande, Linha Pirajá); Ferrari-Perez, Proc. U. S. Nat. Mus., **9**, p. 168, 1886—Paso de la Milpa, Vera Cruz; Salvin, Ibis, 1886, p. 77—Bartica Grove, British Guiana; Allen, Bull. Amer. Mus. N. H., **2**, p. 105, 1889—lower Rio Beni and Mapiri, Bolivia; idem, l.c., **5**, p. 148, 1893—Chapada, Matto Grosso; Chapman, l.c., **6**, p. 69, 1894—Princestown, Trinidad; Salvadori, Boll. Mus. Zool. Torino, **10**, No. 208, p. 20, 1895—Colonia Risso, Paraguay; Hartert, Nov. Zool., **5**, p. 501, 1898—Paramba, Ecuador; Ihering, Ann. Est. Rio Grande do Sul, **16**, p. 141, 1899—Mundo Novo, Rio Grande do Sul; idem, Rev. Mus. Paul., **3**, p. 364, 1899—São Paulo; idem, l.c., **4**, p. 163, 1900—Nova Friburgo and Cantagallo, Rio de Janeiro; Allen, Bull. Amer. Mus. N. H., **13**, p. 131, 1900—Valparaiso, Santa Marta, Colombia; Salvadori and Festa, Boll. Mus. Zool. Torino, **15**, No. 368, p. 31, 1900—Rio Zamora, Ecuador; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 103, 1901—Mexico (Tampico; El Salto, San Luis Potosí; Paso de la Milpa, Jalapa, Córdoba, Uvero, and Playa Vicente, Vera Cruz; Chimalapa, Oaxaca; Tizimin, Yucatan) to Panama; Berlepsch and Stolzmann, Proc. Zool. Soc. Lond., 1902, (2), p. 43—La Merced, Chanchamayo, Peru; Bangs, Proc. New Eng. Zool. Cl., **3**, p. 21, 1902—Bogaba, Chiriquí; Thayer and Bangs, Bull. Mus. Comp. Zool., **46**, p. 145, 1905—San Miguel Island, Pearl Islands, Panama; Hellmayr, Nov. Zool., **13**, p. 46, 1906—Chaguanas and Seelet, Trinidad; idem, l.c., **14**, p. 406, 1907—Humaytá, Rio Madeira; Ihering, Cat. Faun. Braz., **1**, p. 98, 1907—São Paulo (Itapura) and Rio Grande do Sul (Novo Hamburgo); Dearborn, Field Mus. Nat. Hist., Orn. Ser., **1**, p. 83, 1907—Los Amates, Guatemala; Snethlage, Journ. Orn., **56**, p. 22, 1908—Bom Lugar, Rio Purús, Brazil; Berlepsch, Nov. Zool., **15**, p. 293, 1908—Cayenne; Hartert and Venturi, l.c., **16**, p. 240, 1909—Mocoví and Ocampo, Santa Fé; Chubb, Ibis, 1910, p. 74—Ybitimí, Paraguay; Hellmayr, Nov. Zool., **17**, p. 413, 1910—Calama, Rio Madeira; Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 249, 1910 (range in Argentina); Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **26**, (2), pp. 77, 96, 1912—Peixe-Boi, Pará; Peters, Auk, **30**, p. 371, 1913—Camp Mengel, Quintana Roo; Snethlage, Bol. Mus. Goeldi, **8**, p. 140, 1914—Santo Antonio do Prata, Rio Tocantins (Arumatheua), Rio Purús (Bom Lugar), and Counany, Pará, Brazil; Bertoni, Faun. Parag., p. 43, 1914—Alto Paraná, Paraguay; Chubb, Bds. Brit. Guiana, **1**, p. 274, 1916—British Guiana (numerous localities); Chapman, Bull. Amer. Mus. N. H., **36**, p. 250, 1917—Cali and Villavicencio, Colombia; Ménégaux, Rev.

Franç. d'Orn., **9**, p. 37, 1917—Poconé, Matto Grosso; idem, l.c., **10**, p. 290, 1918—Tejú-cuaré, Misiones; Bangs and Penard, Bull. Mus. Comp. Zool., **62**, p. 39, 1918—vicinity of Paramaribo, Wanaweg, and Overtoom, Surinam; Chubb, Ibis, 1919, p. 289—Bellavista, Bolivia; Arribálzaga, El Hornero, **2**, p. 92, 1920—Chaco; Rendahl, Ark. Zool., **13**, (4), p. 20, 1920—Trapiche Island, Pearl Islands; Swann, Syn. List Accip., p. 105, 1920 (range); idem, Syn. Accip., p. 165, 1922 (range); Lönnberg and Rendahl, Ark. Zool., **14**, (25), p. 42, 1922—near Mindo, Ecuador; Todd and Carriker, Ann. Carnegie Mus., **14**, p. 146, 1922—Bonda and Cincinnati, Colombia; Chapman, Bull. Amer. Mus. N. H., **55**, p. 239, 1926—Ecuador (Esmeraldas, Rio de Oro, Naránjo, Santa Rosa, Puná Island, Macas, Rio Suno) (crit.); Sztolcman, Ann. Zool. Mus. Pol. Hist. Nat., **5**, p. 124, 1926—Candido de Abreu, Paraná; Griscom, Bull. Mus. Comp. Zool., **69**, p. 158, 1929—Cana, Darien (breeding); Austin, l.c., p. 373, 1929—Cayo District, British Honduras; Young, Ibis, 1929, p. 13—Blairmont, British Guiana (breeding); Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **12**, p. 457, 1929—Tranqueira, Maranhão; Naumburg, Bull. Amer. Mus. N. H., **60**, p. 113, 1930—Urucúm, Matto Grosso; Laubmann, Wiss. Erg. Deuts. Gran Chaco Exp., Vögel, p. 98, 1930—San José, Formosa, and La Crecencia, Santa Cruz, Bolivia; Peters, Bds. World, **1**, p. 201, 1931 (range); Darlington, Bull. Mus. Comp. Zool., **71**, p. 365, 1931—Rio Frio, Colombia; Griscom, l.c., **72**, p. 313, 1932—Permé and Obaldia, Panama; Belcher and Smooker, Ibis, 1934, p. 589—Caroni Marsh, Trinidad (breeding); Griscom, Auk, **50**, p. 298, 1935—Suretka Farm, Talamanca, Costa Rica; idem, Bull. Mus. Comp. Zool., **78**, p. 298, 1935—Panama; Carriker and de Schauensee, Proc. Acad. Nat. Sci. Phila., **87**, p. 416, 1935—Quirigua, Guatemala; Van Tyne, Misc. Pub., Mus. Zool. Univ. Mich., **27**, p. 18, 1935—Pacamón, Flores and Ixtinta, Petén, Guatemala; Swann, Monog. Bds. Prey, **2**, p. 275, 1936 (monog.); Pinto, Rev. Mus. Paul., **20**, p. 53, 1936—Jaraguá and Inhumás, Rio das Almas, Goyáz; Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 400, 1936—Misiones (Iguazú), Tucumán, and Buenos Aires (Lavalle); Bond, Proc. Acad. Nat. Sci. Phila., **88**, p. 355, 1936—Ruatan and Bonacca Islands, off Honduras; Dickey and van Rossem, Field Mus. Nat. Hist., Zool. Ser., **23**, p. 106, 1938—San Sebastián, Barra de Santiago, and Volcan de Conchagua, El Salvador; Pinto, Rev. Mus. Paul., **22**, p. 65, 1938—Minas Geraes (Theophilo Ottoni, Rio Matipo, Pirapora), São Paulo (Baurú), Rio Grande do Sul (Novo Hamburgo), Matto Grosso (Corumbá), and Goyáz (Canna Brava, Rio das Almas, Inhumás); Dugand, Rev. Acad. Colomb. Cienc., Bogotá, **4**, p. 396, pl. 3, fig. 17, 1941—Colombia; Sutton and Pettingill, Auk, **59**, p. 8, 1942—Gomez Farias, Tamaulipas, Mexico; Gyldenstolpe, K. Svensk. Vetensk. Akad. Handl., (3), **23**, p. 49, 1945—Bolivia, El Beni (Riberalta; Victoria, Puerto Salinas; El Consuelo).

Ictinia plumbea vagans Miller and Griscom, Amer. Mus. Nov., **25**, p. 5, Dec. 9, 1921—Peña Blanca, Nicaragua (type in the American Museum of Natural History, New York).

Ictinia plumbea plumbea Huber, Proc. Acad. Nat. Sci. Phila., **84**, p. 213, 1932—Santa Rosita and Miranda, Nicaragua; Sutton, Wilson Bull., **56**, p. 7, 1944 (conspecific with *misisippiensis*).

Range.—Tropical zone of Mexico (from San Luis Potosí, Tamaulipas, and Oaxaca southward), Central and South America, south to Rio Grande do Sul, Paraguay, and northern Argentina (Tucumán, Chaco, Formosa, Santa Fé, and Misiones); accidental at Lavalle, Buenos Aires.[1]

Field Museum Collection.—52: Mexico (Tampico, 2); Guatemala (Peten, 1; Los Amates, Izabal, 1); El Salvador (San Sebastian, La Paz, 2); Nicaragua (San Gerónimo, Chinandega, 1); Costa Rica (Limón, 1; Talamanca, Puntarenas, 1); Panama (Puerto Obaldia, Darien, 3); Colombia (El Tambo, Munchique, Cauca, 2); Ecuador (Pastaza Andeas, Oriente, 1); Peru (Rioja, San Martin, 1; Alto Quimire, Chanchamayo, Junín, 1; Valle de Chanchamayo, 1); British Guiana (Maspapu, 1; Pickers Gill, Pomeroon River, 1); Brazil (Igarape Aniba, Amazonas, 3; Obidos, Pará, 3; Tranqueira, Maranhão, 1; Rio Baile, Paraná, 1; Candido de Abreu, Paraná, 1; Chapado, Matto Grosso, 2); Bolivia (Yungas de Cochabamba, Cochabamba, 2; Buena Vista, Santa Cruz, 4; Rio Surutú, Santa Cruz, 1; San Carlos, Santa Cruz, 1); Paraguay (Capitan Bado, Cerro Amambay, 6; Villeta, Colonia Nueva Italia, 1); Argentina (Iguazu, Misiones, 3; Eldorado, Misiones, 3).

Genus **ROSTRHAMUS** Lesson

Rostrhamus Lesson, Traité d'Orn., livr. 1, p. 55, Feb., 1830—type, by monotypy, *Rostrhamus niger* Lesson[2]= *Herpetotheres sociabilis* Vieillot.

Hamirostrum Sundevall, Meth. Nat. Av. Disp. Tent., p. 109, 1873—new name for *Rostrhamus* Lesson.

Rostrihamus Bertoni, Anal. Cient. Parag., **1**, p. 171, Jan., 1901—type, by monotypy, *Rostrihamus tenuirostris* Bertoni= *Herpetotheres sociabilis* Vieillot; Berg, Commun. Mus. Nac. Buenos Aires, **1**, No. 8, p. 287, March 18, 1901—emendation of *Rostrhamus* Lesson.

Cymindes "Spix" Oberholser, Proc. Biol. Soc. Wash., **35**, p. 79, March 20, 1922—type, by monotypy, *Cymindes leucopygus* Spix= *Herpetotheres sociabilis* Vieillot (cf. Wetmore, Bull. U. S. Nat. Mus., **133**, p. 107, 1926).

[1] Examination of a large series (more than a hundred specimens) shows the northern race (*vagans*) to be untenable, the supposed difference in size being nonexistent.

[2] Although *Falco hamatus* Temminck (Nouv. Rec. Pl. Col., pl. 61) is erroneously quoted as a synonym, Lesson's description of *R. niger*, as well as the generic characters, are taken from the long-tailed species with white upper and under tail coverts. Cf. also Bangs and Penard, Bull. Mus. Comp. Zool., **62**, p. 38, 1918.

***Rostrhamus sociabilis levis** Friedmann.[1] CUBAN EVERGLADE KITE.

Rostrhamus sociabilis levis Friedmann, Proc. Biol. Soc. Wash., **46**, p. 199, Oct. 26, 1933—Cuba (type in United States National Museum); Swann, Monog. Bds. Prey, **2**, p. 250, 1934—Cuba and Isle of Pines.

Rostrhamus sociabilis (not *Herpetotheres sociabilis* Vieillot) d'Orbigny, in Sagra, Hist. Nat. Cuba, Ois., p. 15, 1839—Cuba (habits); Gundlach, in Poey, Repert. Fis.-Nat. Cuba, **1**, p. 222, 1865; idem, Journ. Orn., **19**, p. 362, 1871—Cuba (descr.; habits); Cory, Auk, **4**, p. 47, 1887—Cuba; idem, Cat. W. Ind. Bds., p. 98, 1892—Cuba and Isle of Pines; Gundlach, Orn. Cub., p. 14, 1895—Cuba and Isle of Pines; Bangs and Zappey, Amer. Natur., **39**, p. 191, 1905—Ciénaga and Santa Rosalia Lagoon, Isle of Pines; Todd, Ann. Carnegie Mus., **10**, p. 192, 1916—Isle of Pines; Swann, Syn. List Accip., p. 99, 1920—part, Cuba.

Rostrhamus hamatus (not *Falco hamatus* Temminck) Gundlach, Journ. Orn., **2**, "1854," Erinnerungsschrift, p. lxxx, 1855—Ciénaga de Zapata, Cuba; idem, l.c., **9**, p. 402, 1861—Cuba.

Rostrhamus sociabilis plumbeus (not of Ridgway) Swann, Syn. Accip., p. 156, 1922—part, Cuba; Barbour, Mem. Nutt. Orn. Cl., **6**, p. 48, 1923—Cuba (Lake Ariguanobo, Cauto Valley, etc.; nest and eggs); Peters, Bds. World, **1**, p. 201, 1931—part, Cuba and Isle of Pines.

Range.—Island of Cuba, including the Isle of Pines, Greater Antilles.

Field Museum Collection.—5: Cuba (Artemisa, Pinar del Rio, 3; San Cristobal, Pinar del Rio, 2).

***Rostrhamus sociabilis plumbeus** Ridgway.[2] EVERGLADE KITE.

Rostrhamus sociabilis var. *plumbeus* Ridgway, in Baird, Brewer, and Ridgway, Hist. N. Amer. Bds., **3**, pp. 208 (in Key), 209, 1874—Everglades of Florida (type, from near head of Miami River, in United States National Museum).

Rostrhamus sociabilis (not *Herpetotheres sociabilis* Vieillot) Cassin, Bds. Calif., Texas, etc., p. 107, 1854—Florida; Swann, Syn. List Accip., p. 99, 1920—part, Florida; Nicholson, Auk, **43**, p. 62, pls. 3, 4, 1926—Florida (breeding habits).

Rostrhamus plumbeus Gurney, Ibis, 1882, pp. 455, 456—Florida (crit.).

Rostrhamus sociabilis plumbeus Swann, Syn. Accip., p. 156, 1922—part, Florida; Peters, Bds. World, **1**, p. 201, 1931—part, Florida; Swann, Monog. Bds. Prey, **2**, p. 249, 1934—Florida (monog.); Bent, Bull. U. S. Nat. Mus., **167**, p. 70, 1937—Florida (life hist.).

[1] *Rostrhamus sociabilis levis* Friedmann: Similar to *R. s. plumbeus* in wing length, but bill conspicuously larger and much the same size as in *R. s. sociabilis*. Wing, 350–371; culmen from cere, 25–26.

[2] *Rostrhamus sociabilis plumbeus* Ridgway differs from the nominate race by decidedly larger size with proportionately smaller bill and generally more plumbeous coloration, particularly about the head and throat. Wing, 340–370; culmen from cere, 22–25.

Range.—Resident locally in tropical Florida.

Field Museum Collection.—19: Florida (Lake Okeechobee, 1; Miami, 1; Brevard County, 1; Caloosahatchee River, 1; Manatee County, 1; Lake Monroe, St. John's River, 1; Palm Beach, 4; Jupiter, 1; Wakeva River, 1; Kissimmee River, 1; unspecified, 3; Fellsmere, 3).

***Rostrhamus sociabilis major** Nelson and Goldman.[1] MEXICAN EVERGLADE KITE.

Rostrhamus sociabilis major Nelson and Goldman, Proc. Biol. Soc. Wash., **46**, p. 193, Oct. 26, 1933—Catemeco, Vera Cruz, Mexico (type in United States National Museum); Swann, Monog. Bds. Prey, **2**, p. 250, 1934—eastern Mexico and Petén, Guatemala; Traylor, Field Mus. Nat. Hist., Zool. Ser., **24**, p. 202, 1941—Pacaitun, Campeche (disc.).

Rostrhamus sociabilis (not *Herpetotheres sociabilis* Vieillot) Moore, Proc. Zool. Soc. Lond., **27**, p. 52, 1859—Petén, Guatemala; Sclater and Salvin, Ibis, 1859, p. 219—Lake of Petén; Sumichrast, La Naturaleza, **5**, p. 237, 1881—San Andrés Tuxtla and Cosamaloapam, Vera Cruz, Mexico; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 99, 1901—part, Mexico (San Andrés Tuxtla, Cosamaloapam) and Guatemala (Petén); Swann, Syn. List Accip., p. 99, 1920—part, Mexico.

Rostrhamus sociabilis plumbeus (not of Ridgway) Swann, Syn. Accip., p. 156, 1922—part, eastern Mexico; Peters, Bds. World, **1**, p. 201, 1931—part, eastern Mexico; Griscom, Bull. Amer. Mus. N. H., **64**, p. 161, 1932—Petén, Guatemala; Van Tyne, Misc. Pub., Mus. Zool. Univ. Mich., **27**, p. 17, 1935—Flores, Petén, Guatemala.

Range.—Breeds locally in eastern Mexico (states of Vera Cruz and Campeche) and Guatemala (Petén district).

Field Museum Collection.—1: Mexico (Pacaitun, Campeche, 1).

***Rostrhamus sociabilis sociabilis** (Vieillot). SOUTHERN EVERGLADE KITE.

Herpetotheres sociabilis Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **18**, p. 318, 1817—based on "Gavilan de estero sociable" Azara, No. 16, Corrientes and La Plata River.

Cymindis[2] *leucopygus* Spix, Av. Spec. Nov. Bras., **1**, p. 7, pl. 2, 1824—"ad flumen Amazonum" (descr. of adult; type in Leyden Museum; cf. Schlegel, Mus. Pays-Bas, Polybori, p. 8, 1862, and Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **22**, No. 3, p. 568, 1906).

[1] *Rostrhamus sociabilis major* Nelson and Goldman: Nearest to *R. s. plumbeus*, but even larger, with considerably larger, heavier bill. Wing, 380; tail, 198; culmen from cere, 30 mm.

[2] Misprinted "*Cymindes*" in the text, but correctly spelled in the Index (p. 1) and on the plate.

Falco hamatus (not of Temminck, 1821) Temminck, Nouv. Rec. Pl. Col., livr. 39, pl. 231 (=young), Oct. 25, 1823; Wied, Beitr. Naturg. Bras., **3**, (1), p. 182, 1830—eastern Brazil.

Rostrhamus niger Lesson, Traité d'Orn., livr. 1, p. 56, Feb., 1830—Brazil (type, collected by A. de Saint-Hilaire, in the Paris Museum).

Cymindis hamatus (not *Falco hamatus* Temminck) Lafresnaye, Mag. Zool., **4**, pl. 20, 1834 (descr.).

Rostrhamus sociabilis d'Orbigny, Voy. Amér. Mérid., Ois., p. 73, 1835—Corrientes (28° S. lat.) to Paraguay and Buenos Aires; Lafresnaye and d'Orbigny, Syn. Av., **1**, in Mag. Zool., **7**, cl. 2, p. 3, 1837—Corrientes (spec. examined); Sclater, Proc. Zool. Soc. Lond., **26**, p. 60, 1858—Rio Napo, Ecuador; idem, l.c., **28**, p. 289, 1860—Babahoyo, Ecuador; Lawrence, Ann. Lyc. Nat. Hist. N. Y., **9**, p. 134, 1868—"Gulf of Nicoya, Costa Rica"; Frantzius, Journ. Orn., **17**, p. 369, 1869—Costa Rica (ex Lawrence); Salvin, Ibis, 1869, p. 317 (no Costa Rican record); Sclater and Salvin, Proc. Zool. Soc. Lond., 1869, p. 160—Conchitas, Buenos Aires; Lee, Ibis, 1873, p. 135—Rio Gato, near Gualeguaychu, Entre Ríos; Berlepsch, Journ. Orn., **21**, p. 283, 1873—Blumenau, Santa Catharina; Durnford, Ibis, 1877, p. 188—Buenos Aires (food); Gurney, l.c., 1879, pp. 338, 341 (crit.; synon.); Gibson, l.c., 1879, p. 413—Cape San Antonio, Buenos Aires (habits); Sclater and Salvin, Proc. Zool. Soc. Lond., 1879, p. 541—Remedios, Antioquia, Colombia; Gurney, Ibis, 1882, p. 456—Demerara, Brazil, etc. (meas.); Nutting, Proc. U. S. Nat. Mus., **6**, pp. 395, 408, 1884—Ometépe Island and Los Sábalos, Nicaragua; Salvin, Ibis, 1886, p. 77—British Guiana (ex Schomburgk); Withington, Ibis, 1888, p. 470—Lomas de Zamora, Buenos Aires; Sclater and Hudson, Arg. Orn., **2**, p. 72, 1889—Argentina (habits); Riker and Chapman, Auk, **8**, p. 161, 1891—Santarem, Brazil; Kerr, Ibis, 1892, p. 142—lower Pilcomayo; Holland, l.c., 1892, p. 204—Estancia Espartillar, Buenos Aires; Robinson, Flying Trip to Tropics, p. 154, 1895—Barranquilla, Colombia; Salvadori, Boll. Mus. Zool. Torino, **10**, No. 208, p. 20, 1895—Colonia Risso, Paraguay; Ihering, Ann. Est. Rio Grande do Sul, **16**, p. 141, 1899—Pedras Brancas and Barra do Rio Camaquam; idem, Rev. Mus. Paul., **3**, p. 361, 1899—Iguapé, São Paulo; Allen, Bull. Amer. Mus. N. H., **13**, p. 131, 1900—Bonda, Colombia; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 99, 1901—part, Nicaragua, Costa Rica, and South America; Lillo, Anal. Mus. Nac. Buenos Aires, **8**, p. 205, 1902—Rio Salí, Tucumán; Bruch, Rev. Mus. La Plata, **11**, p. 251, 1904—Santa Catharina, Jujuy; Lillo, Rev. Letr. Cienc. Soc., **3**, No. 13, p. 62, 1905—Rio Salí, Tucumán; Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **22**, No. 3, p. 569 (note 1), 1906—Corrientes (crit.); idem, Nov. Zool., **14**, p. 89, 1907—Teffé, Rio Solimões, Brazil; Ihering, Cat. Faun. Braz., **1**, p. 410, 1907—São Paulo (Iguapé, Itapura), Paraná (Curytiba), and Maranhão (Bõa Vista), Brazil; Hartert and Venturi, Nov. Zool., **16**, p. 240, 1909—Barracas al Sud, Buenos Aires; Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 246, 1910 (range in Argentina); Carriker, Ann. Carnegie Mus., **6**, p. 467, 1910—Bolson, Costa Rica; Grant, Ibis, 1911, p. 333—Ajó, Buenos Aires; Stone, Proc. Acad. Nat. Sci. Phila., **65**, p. 195, 1913—Caño Corosal, Orinoco Delta, Venezuela; Bertoni, Faun. Parag., p. 43, 1914—Puerto

Bertoni and Iguassú, Paraguay; Cherrie, Sci. Bull., Mus. Brookl. Inst., **2**, p. 346, 1916—Orinoco Valley as far as Ciudad Bolivar; Chubb, Bds. Brit. Guiana, **1**, p. 265, 1916—Supenaam, Abary River, and Mahaicoy; Chapman, Bull. Amer. Mus. N. H., **36**, p. 249, 1917—Barranquilla, Colombia; Dabbene, El Hornero, **1**, p. 96, 1918—Isla Martín Garcia, Buenos Aires; Bangs and Penard, Bull. Mus. Comp. Zool., **62**, p. 38, 1918—vicinity of Paramaribo, Surinam; Gibson, Ibis, 1919, p. 512—Cape San Antonio, Buenos Aires; Rendahl, Ark. Zool., **12**, (8), p. 8, 1919—Nicaragua (Rio Ometépe, San Juan del Norte); Tremoleras, El Hornero, **2**, p. 17, 1920—Uruguay (Canelones, Flores); Swann, Syn. List Accip., p. 99, 1920—part, South and Central America; Hellmayr, Nov. Zool., **28**, p. 176, 1921—Corrientes; Todd and Carriker, Ann. Carnegie Mus., **14**, p. 147, 1922—Bonda, Colombia; Delacour, Ibis, 1923, p. 145—San Fernando, Rio Apure, Venezuela; Young, Ibis, 1927, p. 84—Plantation Alliance, Dutch Guiana; idem, Ibis, 1929, p. 11—coastland of British Guiana (habits); Dugand, Rev. Acad. Colomb. Cienc., Bogotá, **4**, p. 395, pl. 1, fig. 4, pl. 3, fig. 16, 1941—Colombia.

Rostrhamus hamatus Cabanis, in Schomburgk, Reisen Brit. Guiana, **3**, "1848," p. 736, 1849—British Guiana (ex Swainson MS.); Burmeister, Journ. Orn., **8**, p. 242, 1860—near Paraná, Entre Ríos; idem, Reise La Plata St., **2**, p. 435, 1861—near Paraná; Léotaud, Ois. Trinidad, p. 31, 1866—Trinidad; Pelzeln, Orn. Bras., **1**, p. 6, 1868—São Paulo (Teixeira), Goyáz (Porto do Rio Araguay), and Matto Grosso (Cuyabá, Villa Maria); Reinhardt, Vidensk. Medd. Naturhist. Foren., 1870, p. 66—Ibicaba and Soumiduro, São Paulo; Doering, Period. Zool. Arg., **1**, p. 247, 1874—Barráncas, Rio Guayquiraro, Corrientes (food); Ihering, Cat. Faun. Braz., **1**, p. 96, 1907—São Paulo (Iguapé, Itapura) and Paraná (Curytiba).

Ibicter sociabilis Schlegel, Mus. Pays-Bas, Polybori, p. 8, 1862—Brazil (Spix's type).

Rostrhamus leucopygus Sharpe, Cat. Bds. Brit. Mus., **1**, p. 328, 1874—British Guiana (Demerara), Colombia (Bogotá), Peru (Pebas), and Venezuela; Barrows, Auk, **1**, p. 111, 1884—Concepción del Uruguay, Entre Ríos; Salvadori and Festa, Boll. Mus. Zool. Torino, **15**, No. 368, p. 31, 1900—Vinces, Ecuador; Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **22**, No. 3, p. 568, 1906 (crit.); Snethlage, Journ. Orn., **55**, p. 538, 1908—Arumatheua, Rio Tocantins, Brazil; idem, Bol. Mus. Goeldi, **8**, p. 138, 1914—Pará, Peixe-Boi, Rio Tocantins (Arumatheua), Marajó (Pacoval, São Natal), and Maranhão; Reiser, Denks. Math.-Naturw. Kl. Akad. Wiss. Wien, **76**, p. 90, 1910—Bahia (swamp near Joazeiro) and Piauhy (Lake Parnaguá); Snethlage, Bol. Mus. Nac. Rio de Janeiro, **2**, No. 6, p. 68, 1926—São Bento, Maranhão; Stone, Proc. Acad. Nat. Sci. Phila., **80**, p. 154, 1928—Pará.

Rostrihamus tenuirostris Bertoni, Anal. Cient. Parag., **1**, No. 1, p. 171, Jan., 1901—Alto Paraná, Paraguay (type in coll. of A. W. de Bertoni).

Rostrihamus sociabilis Daguerre, El Hornero, **2**, p. 266, 1922—Rosas, Buenos Aires; Serié and Smyth, l.c., **3**, p. 44, 1923—Santa Elena, Entre Ríos; Pereyra, l.c., **3**, p. 165, 1923—Zelaya, Buenos Aires; Renard, l.c., **3**, p. 287, 1924—San Cristóbal, Santa Fé; Girard, l.c., **5**, p. 224, 1933—Tucumán (nest and eggs).

Rostrhamus sociabilis sociabilis Swann, Syn. Accip., p. 156, 1922—Argentina to Colombia; Chapman, Bull. Amer. Mus. N. H., **55**, p. 237, 1926—Yaguachi Marshes, Ecuador; Wetmore, Bull. U. S. Nat. Mus., **133**, p. 106, 1926—Paraguay (west of Puerto Pinasco), Argentina (near Lavalle, Buenos Aires), and Uruguay (San Vicente, Lazcano, Rio Negro); Friedmann, Bull. Mus. Comp. Zool., **68**, p. 158, 1927—Argentina; Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **12**, p. 455, 1929—São Bento, Maranhão; Naumburg, Bull. Amer. Mus. N. H., **60**, p. 111, 1930—Descalvados, Matto Grosso; Peters, Bds. World, **1**, p. 202, 1931—eastern Panama to Argentina and Uruguay; Darlington, Bull. Mus. Comp. Zool., **71**, p. 365, 1931—Rio Frio, Colombia; Griscom, l.c., **72**, p. 313, 1932—Permé, eastern Panama; Stone and Roberts, Proc. Acad. Nat. Sci. Phila., **86**, p. 371, 1934—Descalvados, Matto Grosso; Belcher and Smooker, Ibis, 1934, p. 589—Trinidad; Swann, Monog. Bds. Prey, **2**, p. 247, 1934 (monog.); Laubmann, Verh. Orn. Ges. Bay., **20**, p. 290, 1934—Est. La Geraldina, Santa Fé; Griscom, Bull. Mus. Comp. Zool., **78**, p. 298, 1935—"Obaldia," eastern Panama; Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 401, 1936—Buenos Aires (La Plata, Rio Santiago, etc.) and Chaco (Napalpí); Gyldenstolpe, K. Svensk. Vetensk. Akad. Handl., (3), **23**, p. 49, 1945—Bolivia, El Beni (Bresta; Orion).

Rostrhamus sociabilis plumbeus (not of Ridgway) Peters, Bull. Mus. Comp. Zool., **69**, p. 418, 1929—Toloa Lagoon, Honduras; Stone, Proc. Acad. Nat. Sci. Phila., **84**, p. 299, 1932—Laguna Toloa, Honduras; Griscom, Auk, **50**, p. 298, 1933—Bebedéro, Costa Rica.

Range.—Found sparingly in Honduras (Laguna Toloa), Nicaragua (Rio Ometépe, Rio San Juan del Norte, Los Sábalos), Costa Rica (Bolson), and eastern Panama (Permé), and commonly in South America west of the Andes south to Ecuador and east of the Andes to Uruguay and northern Argentina as far as the provinces of Tucumán, Córdoba and Buenos Aires.[1]

Field Museum Collection.—59: Nicaragua (San Emilio, Rivas, 1); Costa Rica (Bebedéro, Guanacaste, 1); Venezuela (Encontrados, Zulia, 1; Catatumbo, Zulia, 1; Lake Valencia, Carabobo, 4); British Guiana (Georgetown, 2; Buxton, 6; New Amsterdam, 1; Demerara, 1; unspecified, 1); Dutch Guiana (Paramaribo, 2); Brazil (Labrea, Rio Purús, 1; Lago Tapayuna, Amazonas, 3; Itacoatiara, Amazonas, 4; Lago do Baptista, Amazonas, 4; Caxiricatuba, Rio Tapajoz, 1; Boca do Curua, Prainha, Pará, 1; Piquiatuba, Pará, 5; Obidos, Pará, 4; São Bento, Maranhão, 1; Joinville, Santa Catharina, 1; Vaccaria, Matto Grosso, 1); Paraguay (200 km. west of Puerto Casado, 2); Argentina (Concepción, Tucumán, 7; Puerto Segundo, Misiones, 1; Resistencia, Chaco, 1; Isla Ella, delta del Rio Paraná, 1).

[1] The few specimens that have been recorded from Central America are intermediate in size to the Mexican race (*R. s. major*).

Genus HELICOLESTES Bangs and Penard[1]

Helicolestes Bangs and Penard, Bull. Mus. Comp. Zool., **62**, p. 38, April, 1918—type, by orig. desig., *Falco hamatus* "Illiger" Temminck.

*Helicolestes hamatus (Temminck). SLENDER-BILLED KITE.

Falco hamatus (Illiger MS.) Temminck, Nouv. Rec. Pl. Col., livr. 11, pl. 61 (=adult), June, 1821—Brazil (type in Leyden Museum).[2]

Rostrhamus taeniurus Cabanis, Journ. Orn., **2**, "1854," Erinnerungsschr., p. lxxx, 1855—Pará, Brazil (descr. of immature; type in Berlin Museum); Sharpe, Cat. Bds. Brit. Mus., **1**, p. 328, 1874 (ex Cabanis); Gurney, Ibis, 1879, p. 340 (ex Cabanis).

Ibicter sociabilis (not *Herpetotheres sociabilis* Vieillot) Schlegel, Mus. Pays-Bas, Polybori, p. 7, 1862—Brazil and Surinam (descr. of adult).

Rostrhamus sociabilis Sharpe, Cat. Bds. Brit. Mus., **1**, p. 327, 1874—part (descr. of adult in Leyden Museum).

Rostrhamus hamatus Baird, Brewer, and Ridgway, Hist. N. Amer. Bds., **3**, p. 209, 1874—Amazon (crit.); Gurney, Ibis, 1879, pp. 338, 340—Remedios, Colombia (crit.); Sclater and Salvin, Proc. Zool. Soc. Lond., 1879, p. 541—Remedios, Antioquia, Colombia (spec. examined); Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **22**, No. 3, p. 569 (in text), 1906—Brazil (crit.; chars.; nomencl.); Ihering, Cat. Faun. Braz., **1**, p. 409, 1907—Brazil and Guiana; Snethlage, Bol. Mus. Goeldi, **8**, p. 137, 1914—Pará (spec. examined); Swann, Syn. List Accip., p. 100, 1920 (chars.; range).

Helicolestes hamatus Bangs and Penard, Bull. Mus. Comp. Zool., **62**, p. 38, 1918—vicinity of Paramaribo, Surinam (crit.; immature plumage); Swann, Syn. Accip., p. 156, 1922—Brazil, Colombia, and Dutch Guiana; Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **12**, p. 456 (note 1), 1929—Lagunas, lower Huallaga, Peru; Peters, Bds. World, **1**, p. 202, 1931 (range); Swann, Monog. Bds. Prey, **2**, p. 251, 1934 (monog.); Dugand, Rev. Acad. Colomb. Cienc., Bogotá, **4**, p. 395, 1941—Colombia.

Range.—Northern South America from Surinam to Colombia (Remedios, Rio Ité, Antioquia) and from the lower Amazon (Pará region) to eastern Peru (Laguna, lower Huallaga).[3]

[1] Genus *Helicolestes* Bangs and Penard: Similar to *Rostrhamus* Lesson, but tail absolutely and proportionately much shorter; distance between the tips of the longest primaries and longest secondaries not more than 50 mm.; immature plumage slate gray like the adults, but tail with several (two to four) bars of white, and primaries, wing coverts, and parts of the body feathering also barred or flecked with white.

[2] Spec. 1, "Mâle au plumage parfait, Brésil," of *Ibicter sociabilis* Schlegel (Mus. Pays-Bas, Polybori, p. 7, 1862), is doubtless the type of the species, though not listed as such.

[3] This rare species, whose characters have been set forth by Gurney, Hellmayr, and more recently by Bangs and Penard, is recorded from widely scattered localities in Amazonia as well as from Dutch Guiana. The late T. K. Salmon, furthermore,

Field Museum Collection.—4: Peru (Lagunas, lower Huallaga, Loreto, 1); Brazil (Labrea, Rio Purús, 2; Canutama, Rio Purús, 1).

Subfamily ACCIPITRINAE. Bird Hawks

Genus ACCIPITER Brisson

Accipiter Brisson, Orn., **1**, pp. 28, 310, 1760—type, by tautonymy, "*Accipter*" Brisson=*Falco nisus* Linnaeus.

Astur Lacépède, Tabl. Meth. Ois., p. 4, 1799—type, by subs. desig. (Vigors, Zool. Journ., **1**, p. 326, 1824), *Falco palumbarius* Linnaeus=*Falco nisus* Linnaeus.

Nisus Cuvier, Lec. d'Anal. Comp., **1**, tab. 2, 1800—type, by tautonymy, *Falco nisus* Linnaeus.

Hieraspiza Kaup,[1] Classif. Saug. Vögel, p. 116, 1844—type, by subs. desig. (Gray, Cat. Gen. Subgen. Bds., p. 7, 1855), *Falco tinus* Latham=*Falco superciliosus* Linnaeus.

Hieracospiza Agassiz, Nomencl. Zool. Ind. Univ., p. 182, 1846—emendation of *Hieraspiza* Kaup.

Jeraspizia Kaup, Arch. Naturg., **16**, (1), p. 34, 1850—emendation of *Hieraspiza*.

Cooperastur Bonaparte, Rev. Mag. Zool., (2), **6**, p. 538, 1854—type, by subs. desig. (Gray, Cat. Gen. Subgen. Bds., p. 134, 1855), *Falco cooperii* Bonaparte.

Jerospizia Bonaparte, Bull. Soc. Linn. Normandie, **2**, p. 29, 1857—emendation.

Leptohierax Sundevall, Ofv. Vetensk. Akad. Handl., **31**, No. 2, p. 24, 1874—new name for *Cooperastur* Bonaparte.

Hieraspizia Cabanis, Journ. Orn., **22**, p. 228, 1874—emendation of *Hieraspiza* Kaup.

Dinospiziar Cabanis, Journ. Orn., **22**, p. 228, 1874—type, by monotypy, *Astur pectoralis* Bonaparte.

Hieraspizias Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, p. 124, 1876—emendation of *Hieraspiza* Kaup.

obtained an adult female at Remedios, Antioquia, Colombia, which is also wholly typical. Five specimens in the deep neutral gray plumage without any white in the tail measure as follows: Wing, 273–282; tail, 125–140.

Additional material examined.—Colombia: Remedios, 1.—Dutch Guiana: vicinity of Paramaribo, 1.—Brazil: Utinga, Pará, 1; Pará, 1; unspecified, 1.—Peru: Lagunas, 1.

[1] *Hieraspiza* Kaup was originally created for several "East Indian species," to which, the author says, *virgatus* might possibly belong. A few years later (in Oken's Isis, 1847, col. 169) Kaup specifically lists *A. tinus*, *A. minulus*, and *A. virgatus* as pertaining to the genus, among which Gray, in 1855, selected *Falco tinus* as genotype.

***Accipiter gentilis atricapillus** (Wilson). AMERICAN GOSHAWK.

Falco atricapillus Wilson, Amer. Orn., **6**, p. 80, pl. 52, fig. 3, 1812—within a few miles of Philadelphia, Pennsylvania (type in coll. of R. T. Peale, evidently lost).

Daedalion pictum Lesson, Traite d'Orn., livr. 1, p. 67, Feb., 1830—locality unknown; idem, l.c., livr. 8, p. 646, June, 1831—locality stated to be United States (type in Paris Museum; cf. Pucheran, Rev. Mag. Zool., (2), **2**, p. 211, 1850).

Falco regalis Temminck, Nouv. Rec. Pl. Col., livr. 84, pl. 495, May 8, 1830—North America (type in Paris Museum).

Astur atricapillus Schlegel, Mus. Pays-Bas, Astures, p. 17, 1862 (descr.); Sharpe, Cat. Bds. Brit. Mus., **1**, p. 97, 1874 (bibliog.; descr.); Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 45, 1899—part, North America (except islands off Northwest Pacific coast); Swann, Syn. List Accip., p. 20, 1919 (chars.; range).

Astur palumbarius var. *atricapillus* Ridgway, in Baird, Brewer and Ridgway, Hist. N. Amer. Bds., **3**, p. 237, 1874—part (except islands off northwest Pacific coast).

(*Astur atricapillus*) var. *striatulus* Ridgway[1] in Baird, Brewer and Ridgway, Hist. N. Amer. Bds., **3**, pp. 238, 239, 240, January, 1874—western North America (type apparently No. 8508 from Fort Steilacoom, Puget Sound, Washington, in United States National Museum).

Accipiter atricapillus striatulus Ridgway, Bull. U. S. Nat. Mus., **21**, p. 66, 1881—part, North American mainland; Swann, Syn. List Accip., p. 20, 1919—part, North American mainland; Bent, Bull. U. S. Nat. Mus., **167**, p. 139, 1937—part, North American mainland (life hist.).

Astur atricapillus henshawi Nelson,[2] Auk, **1**, p. 166, April, 1884—"Pacific coast region, from southern Arizona to Sitka, Alaska" (no type or type locality given); Ridgway, l.c., **1**, p. 252, 1884 (crit.=*striatulus*).

Astur gentilis atricapillus Swann, Syn. Accip., p. 33, 1921—North America; idem, Monog. Bds. Prey, **1**, p. 188, 1925 (monog.).

Astur gentilis striatulus Swann, Syn. Accip., p. 33, 1921—part, North American mainland; idem, Monog. Bds. Prey, **1**, p. 189, 1925—part, North American mainland.

Astur atricapillus atricapillus Brooks, Condor, **29**, p. 113, 1927 (plumages); Bent, Bull. U. S. Nat. Mus., **167**, p. 125, 1937 (life hist.); Porter, Wilson Bull., **53**, p. 43, 1941—Cheboygan, Michigan (nesting); Porsild, Canad. Field Nat., **57**, p. 25, 1943—Mackenzie Delta (probably nesting).

Accipiter gentilis striatulus Peters, Bds. World, **1**, p. 208, 1931—part, North American mainland.

Accipiter gentilis atricapillus Peters, Bds. World, **1**, p. 208, 1931 (range, in part).

[1] For discussions as to the validity of this race see Taverner, Condor, **42**, p. 157, 1940, and Bond and Stabler, Auk, **58**, p. 346, 1941.

[2] Nelson probably meant to name the dark form from the northwest coast islands, but unfortunately no type was named and the range as given includes all three American races.

Astur atricapillus striatulus Taverner, Condor, **42**, p. 157, 1940 (disc.; not good race).

Accipiter atricapillus atricapillus Bond and Stabler, Auk, **58**, p. 346, pl. 11, 1941 (second year plumage; *A. g. striatulus* a synonym).

Accipiter gentilis Ingles, Condor, p. 215, 1945—Sequoia National Park (nesting).

Range.—Breeds from northwestern Alaska, the Mackenzie Delta and Ungava south to California (Sequoia National Park), Michigan, Maine and New Brunswick. South in the mountains to New Mexico and Pennsylvania. In winter irregularly south to the Mexican border, Texas, Missouri, and Virginia. Occasionally wanders to Vancouver Island on migration.

Field Museum Collection.—83: Alaska (Bethel, 17; Takotna, 2; Takotna Forks, 11; McGrath, 1; Sillokh, Kenai Peninsula, 1); British Columbia (Merville, Vancouver Island, 1; Victoria, 1; Sumas, 1; White Swan Lake, Kootenai Range, 2); Alberta (Red Deer, 2; Hastings Lake, 1; Edmonton, 1; unspecified, 1); Manitoba (St. Vitale, 1); California (Paradise, 1); Arizona (Chiricahua Mountains, Cochise County, 1);[1] Idaho (Coolin, Priest Lake, 1); Montana (Sedan, 1; Rock Creek, 1; South Butte, 1); North Dakota (Nelson County, 1; Pembina County, 1; Pierce County, 1; Rolette County, 1); Minnesota (Jadis, 1; Beaver, Roseau County, 1); Arkansas (Winslow, 1); Wisconsin (Beaver Dam, 1); Illinois (Cook County, 1; Putnam, 1; Jasper County, 1); Maine (Hancock County, 2; Lincoln, 1); Massachusetts (unspecified, 1); Connecticut (New Haven County, 13; Stamford, 3; Norfolk, 2; Killingworth, 1).

*Accipiter gentilis laingi (Taverner).[2] QUEEN CHARLOTTE ISLAND GOSHAWK.

Astur atricapillus laingi Taverner, Condor, **42**, p. 160, May, 1940—Masset, Queen Charlotte Islands, British Columbia (type in the National Museum of Canada, Ottawa, Ontario).

Astur palumbarius var. *atricapillus* Ridgway, in Baird, Brewer and Ridgway, Hist. N. Amer. Bds., **3**, p. 237, 1874—part, islands off northwest Pacific coast.

[1] This specimen was taken on December 23 and does not differ in either coloration or size from other specimens from eastern North America.

[2] *Accipiter gentilis laingi* (Taverner) is like *A. g. atricapillus* but adult is darker with the black of crown of head and nape extending over the shoulders and the interscapulars, and sootier gray ventrally especially across breast. Juveniles with breast stripes very broad and heavy on a light ground that averages deeper in color, while dorsally they are almost or quite solid rich dark brown with little or no light feather-edging or semiconcealed markings (Taverner, Condor, **42**, p. 160, 1940).

Astur atricapillus (not *Falco atricapillus* Wilson) Sharpe, Cat. Bds. Brit. Mus., **1**, p. 97, 1874—part, islands off northwest Pacific coast.

Accipiter atricapillus striatulus Ridgway, Bull. U. S. Nat. Mus., **21**, p. 66, 1881—part, islands off northwest Pacific coast; Swann, Syn. List Accip., p. 20, 1919—part, islands off northwest Pacific coast; Bent, Bull. U. S. Nat. Mus., **167**, p. 139, 1937—part, islands off northwest Pacific coast (life hist.).

Astur gentilis striatulus Swann, Syn. Accip., p. 33, 1921—part, islands off northwest Pacific coast; idem, Monog. Bds. Prey, **1**, p. 189, 1925—part, islands off northwest Pacific coast.

Accipiter gentilis striatulus Peters, Bds. World, **1**, p. 208, 1931—part, islands off northwest Pacific coast.

Range.—Known at present only from Vancouver and the Queen Charlotte Islands, but probably ranges in the islands of the northwest Pacific coast as far north as Sitka or Icy Strait. Occasionally in winter to the mainland around Puget Sound.

Field Museum Collection.—12: British Columbia (Graham Island, 2; Vancouver Island, Comox, 6; Colquitz, 1; Gordon Head, 1; Victoria, 1); Washington (Clallam Bay, Clallam County, 1).

***Accipiter gentilis apache** van Rossem.[1] MEXICAN GOSHAWK.

Accipiter gentilis apache van Rossem, Proc. Biol. Soc. Wash., **51**, p. 99, May 19, 1938—Paradise, Cochise County, Arizona (type in the Dickey Collection, now in the University of California at Los Angeles); idem, Occ. Pap. Mus. Zool., Louisiana State Univ., **21**, p. 53, 1945—Yecora, Sonora.

Astur atricapillus (not *Falco atricapillus* Wilson) Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 45, 1899—part, Mexico (Yecora, Sonora and Sierra Nayarit, Jalisco).

Accipiter gentilis striatulus Peters, Bds. World, **1**, p. 208, 1931—Arizona and (?)Chihuahua.

Accipiter atricapillus striatulus van Rossem, Trans. San Diego Soc. N. H., **8**, p. 126, 1936—southern Arizona.

Astur gentilis subsp. Moore, Condor, **40**, p. 24, 1938—Babizos, Sinaloa (crit.).

Range.—Extreme southern Arizona (Chiricahua Mountains south through Sonora (Yecora) to Jalisco (Sierra Nayarit).

[1] *Accipiter gentilis apache* van Rossem: "Darker and more blackish (less bluish) dorsally even than *A. g. striatulus* (Ridgway) [=*A. g. laingi* Taverner] of the Pacific Northwest, the darkest of the two previously described North American races; young with ventral streaking broader and darker (more guttate, less linear) than in the young of *striatulus* [=*laingi*]. Size largest among the North American races."

The specimen listed above is a juvenile male taken on August 30. It is very dark above and has a large wing measurement, 353 mm. It is very buffy underneath but the streaking is not darker or broader than in many specimens from the northern United States. More specimens are needed for comparison, it would seem, before the validity of this race can be ascertained.

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Field Museum Collection.—1: Arizona (Chiricahua Mountains, Cochise County, 1).

Accipiter bicolor fidens Bangs and Noble.[1] NORTHERN FOUR-BANDED ACCIPITER.

Accipiter bicolor fidens Bangs and Noble, Auk, **35**, p. 444, Oct., 1918—Buena Vista, Vera Cruz, Mexico (type in Museum of Comparative Zoology, Cambridge, Mass.); Swann, Syn. Accip., p. 62, 1921—Mexico; idem, Monog. Bds. Prey, **1**, p. 334, 1926—Mexico; Peters, Bds. World, **1**, p. 217, 1931 (range).

Accipiter pileatus (not *Falco pileatus* Temminck) Sclater, Proc. Zool. Soc. Lond., **27**, p. 389, 1859—Playa Vicente, Vera Cruz.

Accipiter bicolor (not *Sparvius bicolor* Vieillot) Sclater and Salvin, Exot. Orn., p. 137, 1868—part, southern Mexico; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 154, 1874—part, southern Mexico; Sumichrast, La Naturaleza, **5**, p. 236, 1881—Potrero, Vera Cruz, and Tapanatepec, Oaxaca; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 47, 1899—part, Vera Cruz (Jalapa, Potrero, Playa Vicente) and Oaxaca (Tehuantepec); Swann, Syn. List Accip., p. 37, 1919—part, southern Mexico.

Accipiter sexfasciatus (not of Swainson) Cabanis, Journ. Orn., **17**, p. 208, 1869—part, Vera Cruz, Mexico.

Range.—Tropical zone of eastern Mexico, in states of Vera Cruz (Jalapa, Buena Vista, Potrero, Playa Vicente) and Oaxaca (Tapanatepec).

***Accipiter bicolor bicolor** (Vieillot). FOUR-BANDED ACCIPITER.

Sparvius bicolor Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **10**, p. 325, June 21, 1817—Cayenne (type in Paris Museum examined;=young); Pucheran, Rev. Mag. Zool., (2), **2**, p. 92, 1850 (crit.).

Nisus variatus (Cuvier MS.) Lesson, Traite d'Orn., livr. 1, p. 61, Feb., 1830—Cayenne (type[2] in Paris Museum examined); Pucheran, Rev. Mag. Zool., (2), **2**, pp. 6, 210, 1850 (crit.).

Accipiter sexfasciatus Swainson, Anim. Menag., p. 282, Dec. 31, 1837—Guiana (type[3] in the coll. of R. Schomburgk, now in the British Museum, examined); Cabanis, Journ. Orn., **17**, p. 208, 1869—part, Costa Rica.

[1] *Accipiter bicolor fidens* Bangs and Noble: Similar to the nominate race, but larger and darker throughout, blackish slate above and slate gray below. Wing, 255–260; tail, 209–212 (Bangs and Noble). While the adult is unknown to the authors, a young female in changing plumage is indeed larger (wing 260) than any other specimen, and the newly growing feathers on the foreneck are even darker slate gray than in the variety named *A. b. schistochlamys.*

Material examined.—Mexico: Jalapa, Vera Cruz, 1.

[2] The type is the very same specimen sent by Leblond from Cayenne on which *Sparvius bicolor* Vieillot was based.

[3] This is spec. g of the Cat. Bds. Brit. Mus., **1**, p. 155 (Reg. No. 55. 12.19.257). It was presented by the Zoological Society and bore on its stand: "British Guiana

Visus sexfasciatus Cabanis, in Schomburgk, Reisen Brit. Guiana, **3**, "1848," p. 736, 1849—Guiana (ex Swainson).

Nisus pileatus Tschudi, Unters. Faun. Peru., Orn., p. 100, 1846—part, wooded region of Peru; Schlegel, Mus. Pays-Bas, Astures, p. 35, 1862—part, spec. No. 3, Caracas, Venezuela.

Micrastur dynastes Bonaparte, Not. Orn. Coll. Delattre, p. 4, 1854—"Nouvelle Grenade" (cotypes in British Museum examined, Reg. No. 54.1.17.8 and 54.1.17.9;=young).

Accipiter pileatus (not *Falco pileatus* Temminck) Sclater, Proc. Zool. Soc. Lond., **28**, pp. 72, 298, 1860—Pallatanga and Esmeraldas, Ecuador; Salvin, Ibis, 1861, p. 355—Vera Cruz, Guatemala; Lawrence, Ann. Lyc. Nat. Hist. N. Y., **7**, p. 289, 1861—Panama Railroad; Sclater, Proc. Zool. Soc. Lond., 1866, p. 304—part, Cayenne and Guatemala; Pelzeln, Orn. Bras., **1**, p. 8, 1867—part, Barra do Rio Negro, Brazil (spec. examined;= young); Lawrence, Ann. Lyc. Nat. Hist. N. Y., **9**, p. 134, 1868—San José, Dota, and Turrialba, Costa Rica; Frantzius, Journ. Orn., **17**, p. 369, 1869—Costa Rica; Taczanowski, Proc. Zool. Soc. Lond., 1882, p. 47—Huambo, Peru; idem, Orn. Per., **1**, p. 166, 1884—Peru (Guajango, Cutervo, Huambo); Berlepsch and Stolzmann, Proc. Zool. Soc. Lond., 1902, (2), p. 42—La Merced, Peru; Lönnberg and Rendahl, Ark. Zool., **14**, No. 25, p. 36, 1922—road to Gualea, Ecuador; Chapman, Bull. Amer. Mus. N. H., **55**, p. 225, 1926—Ecuador (ex Sclater and Lönnberg).

Accipiter bicolor Sclater and Salvin, Exot. Orn., p. 137, pl. 69, 1868—part, Guatemala to Panama, Colombia, Ecuador, Venezuela, and the Guianas; Salvin, Ibis, 1869, p. 317—Costa Rica (crit.); idem, Proc. Zool. Soc. Lond., 1869, p. 252—Maruria, Lake Valencia, Venezuela; idem, Proc. Zool. Soc. Lond., 1870, p. 215—Chitra, Boqueti de Chitra, Calovevora and Volcan de Chiriqui, Panama; Sclater and Salvin, l.c., p. 782—Merida, Venezuela; iidem, l.c., p. 838—coast of Honduras; iidem, l.c., 1873, p. 303—Santa Cruz, Peru; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 154, 1874 (monog.); Allen, Bull. Essex Inst., **8**, p. 82, 1876—Santarem, Brazil; Taczanowski, Proc. Zool. Soc. Lond., 1877, pp. 329, 333—Tumbez, Peru and Palmal (Prov. Guayas), Ecuador; Sclater and Salvin, Proc. Zool. Soc. Lond., 1879, p. 540—Remedios, Colombia; Boucard, l.c., 1883, p. 457—Aguada de Yoksatz, Yucatan; Taczanowski, Orn. Per., **1**, p. 165, 1884—Peru (Tumbez, Santa Cruz); Salvin, Ibis, 1886, p. 75—Bartica Grove and Roraima, British Guiana; Feledon, Anal. Mus. Nac. Costa Rica, **1**, p. 126, 1887—San José, Costa Rica; Berlepsch, Journ. Orn., **37**, p. 317, 1889—Shanusi, Yurimaguas, Peru; Riker and Chapman, Auk, **8**, p. 161, 1891—Santarem (one immature female); Cherrie, l.c., **9**, p. 328, 1892—San José, Costa Rica; Hartert, Nov. Zool., **5**, p. 502, 1898—Cachavi, Ecuador; Lantz, Trans. Kans. Acad. Sci., **16**, p. 219, 1899—Naranjo, Guatemala; Goodfellow, Ibis, 1902, p. 222—"Santo Domingo" (=Nanegal), Ecuador; Bangs, Bull. Mus. Comp. Zool., **39**, p. 141, 1903—Yarnca, Honduras; Snethlage, Bol. Mus. Goeldi, **8**, p. 128, 1914 (range); Chubb, Bds. Brit. Guiana, **1**, p. 228, 1916—Ituribisi, Mazaruni, Supenaam, Bartica and

collection, July 1, 1840, purchased at Mr. Schomburgk's sale. No. 181 Mr. Swainson's catalogue, labelled *Astur sexfasciatus* in Mr. Swainson's own handwriting."

Roraima;[1] Chapman, Bull. Amer. Mus. N. H., **36**, p. 242, 1917—Colombia (Popayan Purificacion, Florencia); Swann, Syn. List Accip., p. 37, 1919 (in part); idem, Auk, **38**, p. 359, 1921—Culata, Merida, Venezuela.

Nisus bicolor Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, p. 107, 1876—Panama, Costa Rica (San José, Turrialba, Sipurio) (monog.); Ihering, Cat. Faun. Braz., **1**, p. 88, 1907 (range).

Cooperastur bicolor Berlepsch and Hartert, Nov. Zool., **9**, p. 112, 1902—Altagracia, Quiribana de Caicara, and Caicara, Orinoco, Venezuela; Berlepsch, l.c., **15**, p. 291, 1908—Cayenne.

Accipiter bicolor bicolor Hellmayr, Nov. Zool., **13**, p. 382, 1906—Santo Antonio do Prata and Bemfica, Pará; idem, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **26**, (2), p. 96, 1912—same localities; Bangs and Noble, Auk, **35**, p. 443, 1918—Perico and Bellavista, Rio Marañon, Peru; Swann, Syn. Accip., p. 62, 1921 (range); Todd and Carriker, Ann. Carnegie Mus., **14**, p. 148, 1922—Bonda and La Tigrera, Colombia; Swann, Monog. Bds. Prey, **1**, p. 332, 1926 (monog.); Chapman, Bull. Amer. Mus. N. H., **55**, p. 225, 1926—Ecuador (Chongon Hills, Rio de Oro, Gualea, Portovelo, Alamor, Balza, below San José); Griscom, Bull. Mus. Comp. Zool., **69**, p. 157, 1929—Cana, Darien; Peters, l.c., **71**, p. 311, 1931—Fruitvale, Almirante, Panama; Darlington, l.c., p. 366, 1931—Rio Frio, Magdalena, Colombia; Peters, Bds. World, **1**, p. 217, 1931 (range); Griscom, Bull. Amer. Mus. N. H., **64**, p. 151, 1932—Guatemala; idem, Bull. Mus. Comp. Zool., **78**, p. 298, 1935—Panama; Van Tyne, Misc. Pub., Mus. Zool., Univ. Mich., **27**, p. 16, 1935—Uaxactun, Peten, Guatemala; Aldrich, Sci. Pub. Clevel. Mus. N. H., **7**, p. 42, 1937—Paracote, Panama; Pinto, Rev. Mus. Paul., **22**, p. 66, 1935 (range); Traylor, Field Mus. Nat. Hist., Zool. Ser., **24**, p. 202, 1941—Chichen Itza, Yucatan; Gyldenstolpe, K. Svensk. Vetensk. Akad. Handl., (3), **22**, p. 26, 1945—Brazil (Igarape Grande, Rio Juruá; various Amazonian localities) (disc.).

Accipiter bicolor schistochlamys Hellmayr, Bull. Brit. Orn. Cl., **16**, p. 82, May 8, 1906—Nanegal, Ecuador (type in Tring Collection, now in the American Museum of Natural History, New York); Bangs, Auk, **24**, p. 290, 1907—El Pozo and Boruca, Costa Rica; Carriker, Ann. Carnegie Mus., **6**, p. 455, 1910—Costa Rica (Santa Maria de Dota, Pozo Azul de Pirris, El Hogar, Boruca, Buenos Aires); Ménégaux, Miss. Serv. Geog. Armée Mes. Arc Mérid. Equat., **9**, p. B. 12, 1911—Santo Domingo, Ecuador; Peters, Auk, **30**, p. 370, 1913—Xcopen, Quintana Roo; Rendahl, Ark. Zool., **12**, No. 8, p. 8, 1919—Pacuarito, Costa Rica; Swann, Syn. Accip., p. 62, 1921 (range); Lönnberg and Rendahl, Ark. Zool., **14**, No. 25, p. 36, 1922—Alonguinche and near Gualea, Ecuador; Swann, Monog.

[1] Chubb in his description of the adult male states "axillaries, *under wing-coverts*, and thighs rufous" and says that the female is "similar to the male." He says the two specimens were collected on the Supenaam and Mazaruni rivers, respectively. Upon inquiry, Mr. J. D. Macdonald of the British Museum of Natural History writes that the male does have red under wing coverts, but that those of the female are white as in typical *bicolor* and that there is no reason to doubt the authenticity of the localities. The question arises therefore whether this male is simply an aberrant specimen or whether the ranges of typical *bicolor* and *pileatus* overlap, as there is some reason to believe those of *bicolor* and *guttifer* may do in Bolivia.—B.C.

Bds. Prey, 1, p. 333, 1926 (monog.); Peters, Bds. World, 1, p. 217, 1931—western Ecuador.

Range.—Tropical zone of southeastern Mexico (Yucatan) south through Central America, Colombia and Venezuela to Peru (Perico, Guajango, Bellavista, Cutervo, Rio Marañon; Huambo; Santa Cruz and Shanusi, Rio Ucayali; Chanchamayo), eastern Bolivia (Rio Surutú, Santa Cruz), and northern Brazil (Manaos; Santarem, Rio Tapajoz; Primeira Cruz, Maranhão).[1]

Field Museum Collection.—26: Mexico (Chichen Itza, Yucatan, 1); Costa Rica (Villa Quesado, Alajuela, 1); Colombia (Rio Jamparado, Choco, 1; El Tambo, Munchique, Cauca, 4); Venezuela (Rio Aurare, Zulia, 1); Ecuador (Puente de Chimbo, Guayas, 1; Nanegal, Occidente, 1; Baeza, Napo-Pastaza, 1); British Guiana (Boundary Camp, head of Itabu Creek, 2; Middle Base Camp, Itabu Creek, 1); Brazil (Labrea, Rio Purús, 1; Canutama, Rio Purús, 3; Igarape Aniba, Amazonas, 1; Boca Ituqui, Pará, 1; Obidos, Pará, 1; Piquiatuba, Pará, 1); Peru (Alto Quimire, Chanchamayo, Junín, 3); Bolivia (Rio Surutú, Santa Cruz, 1).

***Accipiter bicolor pileatus** (Temminck). PILEATED ACCIPITER.

(?)*Sparvius guttatus* Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **10**, p. 327, 1817—based on "Esparvero pardo y goteado" Azara, No. 24, Paraguay (descr. of young).[2]

[1] From the material at hand the further recognition of *A. b. schistochlamys* seems hardly warranted. While there can be no doubt that adult birds from western Ecuador and Central America—taken as a whole—are darker gray underneath, exceptions to this rule are rather frequent. For instance, a male from British Guiana (Supenaam) is just as dark (light neutral gray) as many western individuals, while one from Yucatan (Tizimin) is even paler (pale gull gray) below than those from Guiana. A bird from Remedios, Antioquia, Colombia, again is inseparable from a Cayenne specimen. Chapman and others also have come to the conclusion that the western form was not properly separable.

A juvenile male from northern Maranhão (Primeira Cruz), though slightly intermediate to *pileatus*, seems to be referable here. However, birds in adult plumage should be examined.

Additional material examined.—Mexico, Yucatan: Tizimin, 1; Peto, 1; Merida, 1.—British Honduras: Cayo District, 1.—Guatemala: Choctum, Vera Paz, 3; Savanna Grande, 1; Duenas, 1.—Honduras: Tegucigalpa, 1.—Nicaragua: San Emilio, 1; Rio Coco, 1; Matagalpa, 1; Ojoche, 1.—Costa Rica: Miravalles, 1; Turrialba, 1.—Panama, Bogaba, 1; Boquete, Chiriqui, 2; Frances, Chiriqui, 1; southern slope of Volcan de Chiriqui, 1; Chitra, Veragua, 2; Veraguas, 4.—Colombia: Remedios, 1; Bogotá, 7.—Ecuador: Nanegal, 1; Balzar, 1; Mouji, 1; Cachabi, 1; Yanayam, 1; Sarayacú, 3.—Venezuela: below Caracas, 1; Limones, Merida, 1; Caicara, Orinoco, 2.—British Guiana: Bartica Grove, 3; Mazaruni, 1; Supenaam, 1; Ituribisi, 1; Roraima, 1; Demerara, 4.—French Guiana: Cayenne, 2.—Brazil: Manaos, Bemfica, 1; Santo Antonio, 1.

[2] Bertoni (Anal. Soc. Cient. Arg., 75, p. 79, note 1, 1913; Faun. Parag., p. 42, 1914) believes Azara's "Esparvero pardo y goteado" to be the juvenile plumage of *Accipiter bicolor pileatus* and while agreeing with him that the description can-

Falco pileatus (Wied MS.) Temminck, Nouv. Rec. Pl. Col., livr. 35, pl. 205, June 20, 1823—"on doit la connaissance de cette espece au prince de Neuwied qui l'a rapporte de ses voyages au Bresil"=Ilha Cachoeirinha, Rio Belmonte, Bahia (type in coll. of Prince Wied, now in the American Museum of Natural History, New York; cf. Allen, Bull. Amer. Mus. N. H., **2**, p. 267, 1889); Wied, Beitr. Naturg. Bras., **3**, (1), p. 107, 1830—Ilha Cachoeirinha, Rio Belmonte, Bahia.

Falco poliogaster Temminck, Nouv. Rec. Pl. Col., livr. 45, pl. 295 (=young), April, 1824—Brazil (part, descr. of juvenile plumage).

Nisus poliogaster d'Orbigny, Voy. Amér. Mérid., Ois., p. 89, 1835—part, Brazil (cf. Hellmayr, Nov. Zool., **28**, p. 181, 1921).

Nisus pileatus Burmeister, Syst. Uebers. Th. Bras., **2**, (1), p. 73, 1855—Nova Friburgo, Rio de Janeiro; Schlegel, Mus. Pays-Bas, Astures, p. 35, 1862—part, No. 1,[1] 2, 4, 6–8, Brazil; Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, p. 109, 1876—Brazil (monog.); Bertoni, Rev. Chil. Hist. Nat., **17**, p. 222, 1913—Paraguay (crit.).

Accipiter pileatus Sclater, Proc. Zool. Soc. Lond., 1866, p. 304—part, Brazil; Pelzeln, Orn. Bras., **1**, p. 8, 1867—part, São Paulo (Murungaba, Rio Paraná) and Matto Grosso (Jauru); Berlepsch, Journ. Orn., **21**, p. 284, 1873—Blumenau, Santa Catharina; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 153, 1874—Brazil; Berlepsch and Ihering, Zeits. Ges. Orn., **2**, p. 170, 1885—Rio Grande do Sul (Taguara Arroio Grande, Linha Piraja); Allen, Bull. Amer. Mus. N. H., **5**, p. 147, 1893—Chapada, Matto Grosso; Ihering, Ann. Est. Rio Grande do Sul, **16**, p. 139, 1899—Mundo Novo and Linha Piraja, Rio Grande do Sul; idem, Rev. Mus. Paul., **3**, p. 350, 1899—São Paulo; idem, l.c., **4**, p. 162, 1900—Nova Friburgo, Rio de Janeiro; Ihering, Cat. Faun. Braz., **1**, p. 88, 1907—Ubatuba, São Paulo and São Lourenco, Rio Grande do Sul; Chubb, Ibis, 1910, p. 71—Sapucay, Paraguay (egg descr.); Reiser, Denks. Math.-Naturw. Kl. Akad. Wiss. Wien, **76**, p. 89, 1910—Bahia (Fazenda da Serra Lagoa da Estreme, Rio Grande; Barra Vermelha, Rio Preto) and Piauhy (Os Umbus, Parnagua), Brazil; Bertoni, Faun. Parag., p. 42, 1914—Alto Paraná, Paraguay; Swann, Syn. List Accip., p. 37, 1919 (range); Hellmayr, Nov. Zool., **28**, p. 183, 1921 (range; crit.); Swann, Syn. Accip., p. 61, 1921 (range); Sztolcman, Ann. Zool. Mus. Pol. Hist. Nat., **5**, p. 123, 1926—Fazenda Durski and Guarapuava, Paraná; Snethlage, Bol. Mus. Nac. Rio de Janeiro, **2**, (6), p. 47, 1926—Ceará; Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **12**, p. 458, 1929—Tranqueira, Maranhão, and Ibiapaba, Piauhy; Naumburg, Bull. Amer. Mus. N. H., **60**, p. 106, 1930—Matto Grosso.

Accipiter bicolor pileatus Swann, Monog. Bds. Prey, **1**, p. 334, 1926 (monog.); Peters, Bds. World, **1**, p. 217, 1931 (range, except Argentina); Pinto, Rev. Mus. Paul., **20**, p. 51, 1936—Inhumas (Rio Meia Ponte), Goyaz;

not possibly refer to *A. guttifer* (=*A. guttatus* auct.) we do not consider it sufficiently clear to justify the rejection of the well-established name *pileatus* in favor of Vieillot's more or less obscure term *guttatus*.

[1] Schlegel claims a Natterer specimen received in exchange from the Vienna Museum to be the original of plate 205.

Pinto, Rev. Mus. Paul., **22**, p. 66, 1938—Bahia (Bomfim), Minas Geraes (Pirapora), São Paulo (Ubatuba, Presidente Epitacio, Cananea), Rio Grande do Sul (São Lourenco) and Goyaz (Inhumas); Conover, Fieldiana, Zool., **31**, p. 33, 1946—Chapada, Matto Grosso (range; disc.).

Range.—Tableland of Brazil from southern Maranhão and Piauhy south in the west to central Matto Grosso and in the east to Rio Grande do Sul, and (?)eastern Paraguay.[1]

Field Museum Collection.—2: Brazil (Tranqueira, Maranhão, 1; Ibiapaba, Piauhy, 1).

***Accipiter bicolor guttifer** Hellmayr.[2] BOLIVIAN ACCIPITER.

Accipiter guttifer Hellmayr, Verh. Orn. Ges. Bay., **13**, p. 200, Sept. 20, 1917—based on *Accipiter guttatus* Sclater and Salvin, Exot. Orn., livr. 11, p. 169, pl. 85, 1867—Bolivia (type in Norwich Museum); idem, Nov. Zool., **28**, p. 181, 1921—Santa Cruz de la Sierra and Torochito (Mizgue), Bolivia (crit.); Swann, Syn. Accip., p. 61, 1921—"Paraguay" and Bolivia (chars.); Giacomelli, El Hornero, **3**, p. 77, 1923—Santa Cruz, Sierra de la Rioja; Wetmore, Bull. U. S. Nat. Mus., **133**, p. 115, 1926—Tapia, Tucumán; Swann, Monog. Bds. Prey, **1**, p. 331, 1926 (monog.); Laubmann, Wiss. Erg. Deuts. Gran Chaco Exp., Vogel, p. 99, 1930—Formosa (Tapikiole) and Bolivia (Villa Montes, Tarija) (crit.); Peters, Bds. World, **1**, p. 218, 1931—southern Bolivia to northwestern Argentina; Oberholser, Proc. Colorado Mus. N. H., **10**, (5), p. 24, 1931—Descalvados, Matto Grosso; Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 405, 1936—Pantanos del Palmas, Dept. Santa Barbara, Jujuy (range); Brodkorb, Proc. Biol.

[1] Records of *A. b. pileatus* from Peru and Ecuador are due to confusion with *A. b. bicolor*.

Additional material examined.—Piauhy: Os Umbus, 1.—Bahia: Fazenda da Serra, Rio Grande, 1; Lagoa da Estrema, Rio Grande (=Villa Nova), 1.—Rio de Janeiro, 6.—São Paulo: Rio Paraná, 1.—Matto Grosso: Chapada, 1.—Paraná: Roca Nova, Serra do Mar, 1.—Santa Catharina: Blumenau, 3.—Rio Grande do Sul: Taquara, 5.—Paraguay: Sapucay, 1; Villa Rica, 1.

[2] *Accipiter bicolor guttifer* Hellmayr is clearly a geographical representative of *A. bicolor*. Its principal character in adult plumage is the tawny color of the breast and abdomen, while the juvenile dress is boldly spotted with blackish underneath.

Graham Kerr's specimen (an adult male in fresh plumage) from the lower Pilcomayo, recorded as *A. chilensis*, proves to be perfectly typical of *guttifer*. Perhaps a similar mistake was made by Reed when recording "*guttatus*" from Mendoza, which is much more likely to be *A. b. chilensis*.—C.E.H.

As pointed out in my paper (Fieldiana, Zool., **31**, p. 40, 1946) Dr. Hellmayr's original manuscript kept *Accipiter bicolor* Vieillot and *A. guttifer* Hellmayr as distinct species and made the latter a race of *A. chilensis* Philippi and Landbeck. Specimens in Field Museum, however, showed that *guttifer* and *pileatus* (which Hellmayr considered a race of *bicolor*) were conspecific; therefore, the forms have been arranged as shown above.—B.C.

Additional material examined.—Brazil: Urucum, near Corumba, Matto Grosso, 1.—Bolivia: San Lorenzo, Tarija, 1.—Paraguayan Chaco: 195 km. west of Puerto Casado, 9.—Argentina: Rio de Oro, Chaco Austral, 1; Ledesma, Jujuy, 3; Jujuy, 2; Metan, Salta, 2; Rio Bermejo, Oran, Salta, 1; Concepción, Tucumán, 2; Cumbre de Raco, Tucumán, 1.

Soc. Wash., **50**, p. 33, 1937—265 km. west of Puerto Casado, Paraguayan Chaco.

Nisus poliogaster (not *Falco poliogaster* Temminck) d'Orbigny, Voy. Amér. Mérid., Ois., p. 181, 1835—part, Santa Cruz and Chiquitos (cf. Hellmayr, Nov. Zool., **28**, p. 181, 1921).

Nisus pileatus d'Orbigny, Voy. Amér. Mérid., Ois., p. 90, 1835—Itaty and Iribucua, Corrientes.

Accipiter guttatus (not *Sparvius guttatus* Vieillot) Sclater and Salvin, Exot. Orn., livr. 11, p. 169, pl. 85, 1867—Bolivia; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 152, 1874—"Paraguay" and Bolivia; Salvadori, Boll. Mus. Zool. Torino, **12**, No. 292, p. 29, 1897—Lesser, Salta; Lillo, Anal. Mus. Nac. Buenos Aires, **8**, p. 203, 1902—Tucumán and Tafí Viejo, Tucumán; idem, Rev. Letr. Cienc. Soc., **3**, (3), p. 62, 1905—same localities; Hartert and Venturi, Nov. Zool., **16**, p. 238, 1909—Tucumán (Los Vasques, Tucumán, Cumbre de Raco), Jujuy (Ledesma), Salta (Metan) and Chaco Austral (Rio de Oro); Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 243, 1910 (range in Argentina); idem, Bol. Soc. Physis, **1**, p. 300, 1914 (range in Argentina); (?)Reed, Aves Prov. Mendoza, p. 20, 1916—Lujan de Cuyo, Mendoza; Swann, Syn. List Accip., p. 37, 1919 (range); Arribalzaga, El Hornero, **2**, p. 93, 1920—Chaco.

Nisus guttalus Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, p. 106, 1876 (ex Sharpe).

Accipiter chilensis (not of Philippi and Landbeck) Kerr, Ibis, 1892, p. 143—lower Pilcomayo, Chaco (spec. examined).

Accipiter pileatus Lillo, Anal. Mus. Nac. Buenos Aires, **8**, p. 203, 1902—Tucumán and Vipos, Tucumán; Lönnberg, Ibis, 1903, p. 465—Tatarenda, Tarija, Bolivia; Lillo, Rev. Letr. Cienc. Soc., **3**, (13), p. 62, 1905—Tucumán and Vipos, Tucumán; Arribalzaga, El Hornero, **2**, p. 93, 1920—Chaco Argentino; Friedmann, Bull. Mus. Comp. Zool., **68**, p. 160, 1927—Concepción, Tucumán.

(*Accipiter bicolor*) 4. *pileatus* Stresemann, Journ. Orn., **72**, p. 437, 1924—Villa Montes, Tarija, Bolivia.

Accipiter bicolor pileatus Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 402, 1936—Puerto Diaz, Salta (range in Argentina).

Accipiter bicolor guttifer Conover, Fieldiana, Zool., **31**, p. 39, 1946—Matto Grosso (Corumba), Bolivia (San Lorenzo, Tarija), Paraguayan Chaco, Argentina (Rio de Oro, Chaco Austral; Salta; Tucumán) (range; disc. dist. chars.).

Range.—Tropical zone of southern Bolivia (Dept. Santa Cruz to Tarija), western Matto Grosso (Descalvados);[1] Argentina, from Corrientes, Formosa and the Chaco west to La Rioja, Tucumán,

[1] Ihering's record (Ann. Est. Rio Grande do Sul, **16**, p. 139, 1899; Cat. Faun. Braz., **1**, p. 88, 1907) from Rio Grande do Sul must be a mistake. Pinto, in his recent catalogue of Brazilian birds, does not list the species at all, although Ihering claims to have obtained it in Rio Grande do Sul, nor is it represented among Ihering's birds in the Berlepsch Collection.

Salta and Jujuy; and the Paraguayan Chaco (lower Pilcomayo; 265 km. west of Puerto Casado).

Field Museum Collection.—10: Bolivia (Pulquina, Santa Cruz, 1); Paraguay (195–265 km. west of Puerto Casado, Chaco, 7); Argentina, Tucumán (Concepción, 1; Taficillo, 1).

***Accipiter bicolor chilensis** Philippi and Landbeck. CHILEAN ACCIPITER.

Accipiter chilensis Philippi and Landbeck, Arch. Naturg., **30**, (1), p. 43, Jan., 1864—Chile (cotypes from Santiago and Valdivia, in Museo Nacional, Santiago de Chile; cf. Gigoux and Looser, Bol. Mus. Nac. Santiago, **13**, p. 21, 1930); Landbeck, Anal. Univ. Chile, **24**, p. 346, Apr., 1864—from Aconcagua Province to Chiloe, common in the vicinity of Valdivia, Chile; Sclater, Proc. Zool. Soc. Lond., 1867, pp. 329, 338—Chile (crit.); Sclater and Salvin, Exot. Orn., p. 73, pl. 37, 1867—Chile and Straits of Magellan; iidem, Ibis, 1868, p. 188—Sandy Point, Straits of Magellan; Philippi, Anal. Univ. Chile, **31**, p. 245, 1868—Chile; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 155, 1874—Chile (Santiago) and Straits of Magellan; Reed, Anal. Univ. Chile, **49**, p. 558, 1877—Cauquenes, Colchagua, Chile; Allen, Bull. Amer. Mus. N. H., **2**, p. 105, 1889—Valparaiso, Chile; Oustalet, Miss. Sci. Cap Horn, **6**, p. B. 21, 1891—Punta Arenas, Orange Bay (Hoste Island), and Gable Island (crit.); Reed, Anal. Univ. Chile, **93**, p. 206, 1893—Chile; Lane, Ibis, 1897, p. 180—Maquegua, Arauco, Chile; Salvadori, Ann. Mus. Civ. Stor. Nat. Genova, **40**, p. 614, 1900—Punta Arenas and Penguin Rookery, Staten Island; Philippi, Anal. Mus. Nac. Chile, **15**, p. 2, pl. 1, 1902—Chile (descr.; crit.); Arribalzaga, Anal. Mus. Nac. Buenos Aires, **8**, p. 160, 1920—Lago General Paz, Chubut; Dabbene, l.c., p. 355, 1902—Ushuaia, Tierra del Fuego; idem, l.c., **18**, pp. 243, 414, 1910 (range in Argentina); Scott and Sharpe, Rep. Princet. Univ. Exp. Patagonia, **2**, Orn., p. 605, 1915 (descr.; synon.; range); Swann, Syn. List Accip., p. 38, 1919 (chars.; range); idem, Syn. Accip., p. 62, 1921 (range); (?)Giacomelli, El Hornero, **3**, p. 77, 1923—La Barrera, plain of La Rioja; (?)Vallentin, in Boyson, The Falkland Islands, p. 332, 1924—Falkland Islands;[1] Wetmore, Univ. Calif. Pub. Zool., **24**, p. 423, 1926—Rio Fetaleufu, Chubut; Swann, Monog. Bds. Prey, **1**, p. 336, 1926 (monog.); Peters, Bds. World, **1**, p. 218, 1931 (range); Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **19**, p. 279, 1932—Aconcagua to the Straits of Magellan (crit.); Reynolds, El Hornero, **5**, p. 348, 1934—mountains north of Bahia Moat, Tierra del Fuego; Bullock, Rev. Chil. Hist. Nat., **39**, p. 240, 1935—Isla la Mocha, Chile; Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 406, 1936 (range in Argentina); Housse, Rev. Chil. Hist. Nat., **41**, p. 134, 1938—Chile (range; habits).

Accipiter cooperi (not *Falco cooperii* Bonaparte) Des Murs, in Gay, Hist. Fis. Pol. Chile, Zool., **1**, p. 237, 1847—Chile to Magellan Straits; Pelzeln, Reise Novara, **1**, Vogel, p. 13, 1865—Chile (crit.); Housse, Rev. Chil. Hist. Nat., **29**, p. 142, 1925—San Bernardo, Santiago, Chile.

[1] Probably confused with *Circus cinereus* Vieillot.

Accipiter pileatus (not *Falco pileatus* Temminck) Des Murs, in Gay, Hist. Fís. Pol. Chile, Zool., **7**, p. 236, 1847—Chile (part, excl. of description); Albert, Anal. Univ. Chile, **108**, p. 280, 1901—Chile (crit.).

Accipiter magnirostris (not *Falco magnirostris* Gmelin) Des Murs, in Gay, Hist. Fís. Pol. Chile, Zool., **1**, p. 235, 1847—Chile (part, excl. of description); Boeck, Naumannia, 1855, p. 498—Valdivia.

Nisus pileatus Hartlaub, Naumannia, **3**, p. 209, 1853—Valdivia, Chile; Schlegel, Mus. Pays-Bas, Astures, p. 35, 1862—part, No. 5, Santiago, Chile.

Nisus chilensis Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, p. 106, 1876 (monog.).

(?)*Accipiter guttatus* (not *Sparvius guttatus* Vieillot) Reed, Av. Prov. Mendoza, p. 20, 1916—Lujan de Cuyo, Mendoza.

Cooperastur chilensis Housse, Rev. Chil. Hist. Nat., **29**, p. 225, 1925—Isla La Mocha, Arauco, Chile; Jaffuel and Pirion, l.c., **31**, p. 103, 1927—Marga-Marga Valley, Valparaiso, Chile; Kuroda, Tori, **8**, p. 140, 1933—San Bornonol, Perquenco, Chile.

Range.—Chile, from Aconcagua Province south to the Straits of Magellan, Tierra del Fuego and Staten Island, and along the Argentine slope of the Andes through western Chubut (Lago General Paz; Valle del Lago Blanco; Rio Fetaleufu) and Rio Negro to Lake Nahuel Huapi; (?) occasional at Mendoza (Luian de Cuyo) and La Rioja (La Barrera).[1]

Field Museum Collection.—5: Chile (Maquehue, Temuco, Cautín, 1; Rinihue, Valdivia, 1; Puerto Montt, Llanquihue, 1; Hermita Island, Magallanes, 1); Argentina (Valle del Lago Blanco, Chubut, 1).

*Accipiter gundlachi Lawrence.[2] CUBAN ACCIPITER.

Accipiter gundlachi(i) Lawrence, Ann. Lyc. Nat. Hist. N. Y., **7**, p. 252, May, 1860—Hanabana, Cuba (type in coll. of J. Gundlach); Albrecht, Journ. Orn., **9**, p. 200, 1861—Cuba (descr. adult male); Gundlach, in Poey, Rep. Fis. Nat., Cuba, **1**, p. 224, Nov., 1865—Cuba (breeding in March);

[1] *Additional material examined.*—Chile: Santiago, 1; Maquegua, Arauco, 1; Maquehue, Temuco, Cautín, 2; Pelal, Temuco, Cautín, 2; unspecified, 4.—Straits of Magellan, 2.—Argentina: Valle del Lago Blanco, Chubut, 2; Lago Nahuel Huapi, Rio Negro, 1.

[2] The taxonomic position of this rare hawk has been in doubt. So far as coloration is concerned it most closely resembles *Accipiter bicolor guttifer* but is larger (wing of male 245 and of female 298 mm.) and has a much heavier foot and tarsus. A female examined has gray under parts rather heavily washed with rufous, especially about the abdomen, while the breast has numerous rather indistinct white spots and bars. The thighs, under wing coverts, and axillaries are also spotted with white.

In an adult male the foreneck, chest, upper breast, and flanks are grayish ash indistinctly tinged with dull rufescent along the shafts of the feathers. The

idem, Journ. Orn., **19**, p. 367, 1871—Cuba (plumages; habits); Sharpe, Cat. Bds. Brit. Mus., **1**, p. 137, 1874 (ex Lawrence); Cory, Bds. W. Ind., p. 198, 1889—Cuba; idem, Cat. W. Ind. Bds., p. 98, 1892—Cuba; Barbour, Mem. Nutt. Orn. Cl., **6**, p. 45, 1923—Cuba (nearly extinct); Swann, Monog. Bds. Prey, **1**, p. 294, 1926 (monog.); Peters, Bds. World, **1**, p. 217, 1931—Cuba; Conover, Fieldiana, Zool., **31**, p. 41, 1946 (disc. tax. position).

Astur cooperii (not *Falco cooperii* Bonaparte) Lembeye, Av. Cuba, p. 17, 1850—Cardenas, Cuba (July, 1841); Gundlach, Journ. Orn., **2**, Extraheft, p. lxxxii, 1854—Cuba.

Nisus pileatus (not *Falco pileatus* Temminck) Lembeye, Av. Cuba, p. 125, 1850—Cienagas de Zapata, Cuba.

Astur pileatus Gundlach and Cabanis, Journ. Orn., **2**, Extraheft, p. lxxxii, 1854—Cuba (one male, Nov., 1849).

(*Nisus cooperi*) var. *Gundlachi*, Ridgway, in Baird, Brewer and Ridgway, Hist. N. Amer. Bds., **3**, p. 223 (note), 1874—Cuba (descr. of young).

Nisus gundlachi Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, p. 104, 1876—Cuba (monog.).

Accipiter cooperi gundlachi Swann, Syn. List Accip., p. 32, 1919; idem, Syn. Accip., p. 53, 1921—Cuba.

Range.—Island of Cuba, Greater Antilles.

Field Museum Collection.—2: Cuba (Havana, 1; Guantanamo, Santa Clara, 1).

***Accipiter cooperii** (Bonaparte). COOPER'S HAWK.

Falco cooperii Bonaparte, Amer. Orn., **2**, p. 1, pl. 10, fig. 1, 1828—near Bordentown, New Jersey (type in coll. of C. L. Bonaparte, now in Paris Museum; cf. van Rossem, Auk, **54**, p. 203, 1937).

Falco Stanleii Audubon, Orn. Biog., **1**, p. 186, 1831—Kentucky and Niagara Falls (probably no type extant); idem, Bds. Amer., pls. 36, 141, 1831.

Accipiter mexicanus Swainson, in Richardson and Swainson, Fauna Bor. Amer., **2**, 1831, p. 45 (note), Feb., 1832—Real del Monte, Hidalgo, Mexico (type in coll. of M. Taylor).

Astur cooperi Schlegel, Mus. Pays-Bas, Astures, p. 18, 1862—Tennessie and "Haiti" (crit.).

Accipiter cooperi(i) Lawrence, Ann. Lyc. Nat. Hist. N. Y., **9**, p. 134, 1868—El Mojon, Costa Rica; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 137, 1874

white spotting is rather indistinct and confined to the crissum, while the thighs are pure rufous, except that each feather is tipped by a very narrow, almost obsolete line of white.

An immature male resembles immatures of *guttifer* but the throat is finely streaked with dusky and the brown shaft lines to the feathers of the under parts are lighter and narrower. The specimen is in transition plumage as the thighs are reddish barred with white as are some of the flank feathers.

This hawk does not appear to be extinct, since one of the examples examined was taken in 1935.

Additional material examined.—Cuba: Artemisa, Pinar del Rio, 1.

(descr.); Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 46, 1899—North America to Mexico, Guatemala and Costa Rica (El Mojon); Carriker, Ann. Carnegie Mus., **6**, p. 454, 1910—Costa Rica (winter visitant); Peters, Bds. World, **1**, p. 217, 1931 (range); Bent, Bull. U. S. Nat. Mus., **167**, p. 112, 1937 (life hist.); Cooke, Bd.-Banding, **12**, p. 152, 1941—Colonia Agricola de Sumapaz, Colombia (banded in Manitoba).

Nisus cooperi Ridgway, in Baird, Brewer and Ridgway, Hist. N. Amer. Bds., **3**, p. 230, 1874 (monog.); idem, Bull. U. S. Geol. Geog. Surv. Terr., **2**, p. 97, 1876 (monog.; full bibliog.).

Nisus cooperi var. *mexicanus* Ridgway, in Baird, Brewer and Ridgway, Hist. North Amer. Bds., **3**, pp. 224, 231, 1874—western N. America and Mexico (crit.).

Accipiter cooperi(i) mexicanus Ridgway, Proc. U. S. Nat. Mus., **11**, p. 92, 1888 (crit.); Swann, Syn. List Accip., p. 32, 1919—western United States and Central America (chars.); idem, Syn. Accip., p. 53, 1921 (chars.; range); idem, Monog. Bds. Prey, **1**, p. 292, 1926 (monog.); van Rossem, Trans. San Diego Soc. Nat. Hist., **6**, p. 272, 1931—Saric, Chinobampa, Sonora (crit.); Griscom, Bull. Amer. Mus. N. H., **64**, p. 151, 1932—Guatemala; van Rossem, Bull. Mus. Comp. Zool., **77**, p. 428, 1934—Sonora (Alamos, Oposura) and Chihuahua (Bravo); van Rossem, Occ. Pap. Mus. Zool. Louisiana State Univ., **21**, p. 53, 1945—Sonora (nesting; distr.), p. 54 (footnote) (tax.; disc.).

Accipiter cooperi(i) cooperi(i) Swann, Syn. List Accip., p. 32, 1919—middle and southern United States (chars.); idem, Syn. Accip., p. 53, 1921 (chars.; range); idem, Monog. Bds. Prey, **1**, p. 291, 1926 (monog.).

Range.—Southern British Columbia, southern Alberta, central Quebec and Nova Scotia south over the United States to northern and western Mexico; winters from the northern United States south to Mexico and Guatemala, occasionally even to Costa Rica (El Mojon)[1] and Colombia (Colonia Agricola de Sumapaz).

Field Museum Collection.—85: British Columbia (Okanagan, 2); Oregon (Prospect, Jackson County, 2; Eagle Point, Jackson County, 1); California (Del Monte Forest, Monterey County, 1; Santa Monica Canyon, 1; Placerita Canyon, 1; Redlands, 1; Big Bear Lake, 1); Arizona (Palmerlee, 1; Chiricahua Mountains, 1; Cochise County, 1; Huachuca Mountains, 1; Phoenix, 1; Tucson, 1; Santa Rita Mountains, 1); Idaho (Coolin, Priest Lake, 1); Colorado (New Castle, 1); New Mexico (Rincon, 1; Deming, 1); Texas (Harlingen, 1; Lee County, 1); North Dakota (Ramsey County, 1); Nebraska (Lincoln, 1); Arkansas (Winslow, 2); Minnesota (Jadis, Roseau

[1] While it is admitted that immature birds from the western United States are generally more heavily striped underneath, the proportion of distinguishable specimens is too small to warrant the recognition of a western race (*mexicanus*). Both adult (breeding July) and young birds from the Sierra Madre, Nayarit, are exactly like others from the eastern United States. More than one hundred specimens in all were examined.

County, 1); Wisconsin (Beaver Dam, 6; Delton, 2); Illinois (Lake County, 2; Cook County, 1; Lewistown, 3); Michigan (Benzie County, 4); Connecticut (Lyme, 2; Black Hall, 2; Hadlyme, 1; New Haven County, 16; Stamford, 4; Goodspeed Lodge, 1); New Jersey (Orange, 3); Georgia (Roswell, 6); Florida (Zolfa Springs, 1); Mexico (La Paz, Lower California, 1; Cibuta, Sonora, 2).

Accipiter pectoralis (Drapiez). RUFOUS-BREASTED HAWK.

Falco pectoralis Drapiez,[1] Dict. Class. Sci. Nat., **4**, p. 340, 1838—"l'Amerique meridionale" (location of type not stated).

"F. pectoralis Cuv. (*Buteo pectoralis?* Vieillot)"[2] Bonaparte, Rev. Mag. Zool., (2), **2**, p. 490, 1850—Brazil (descr. of type in Antwerp Museum, now in Brussels Museum; cf. Gurney, List Diurn. Bds. Prey, p. 44 [note 4], 1884).

Accipiter pectoralis Sclater, Ibis, 1861, p. 313, pl. 10 (descr.); Pelzeln, l.c., 1862, p. 194—Ypanema and Borba (soft parts); Sclater, Proc. Zool. Soc. Lond., 1866, p. 304 (listed); Sclater and Salvin, Exot. Orn., p. 170, 1869-Ypanema and Borba, Brazil; Salvin, Ibis, 1874, p. 321 (spec. in Philadelphia); Stresemann, Journ. Orn., **72**, p. 437, 1924 (range); Peters, Bds. World, **1**, p. 218, 1931 (range); Pinto, Rev. Mus. Paul., **22**, p. 67, 1938—São Gabriel, Rio Negro and Bauru, Rio Feio, São Paulo; idem, l.c., **23**, p. 504, 1938—São Gabriel, Rio Negro; Laubmann, Physis, **16**, p. 110, 1939 (range).

Astur pectoralis Schlegel, Mus. Pays-Bas, Astures, p. 18, 1862—Brazil (descr. of "type" in Antwerp Museum); Pelzeln, Orn. Bras., **1**, p. 6, 1867—Ypanema, São Paulo, and Borba, Rio Madeira, Brazil; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 121, 1874—Brazil; Ihering, Rev. Mus. Paul., **3**, p. 349, 1899—São Paulo; idem, l.c., **4**, p. 162, 1900—Cantagallo, Rio de Janeiro; idem, Cat. Faun. Braz., **1**, p. 87, 1907—Bauru, São Paulo; Snethlage, Bol. Mus. Goeldi, **8**, p. 128, 1914—Pará; Swann, Syn. List Accip., p. 27, 1919—Brazil, Guiana and Ecuador; idem, Syn. Accip., p. 45, 1921 (chars.; range); idem, Monog. Bds. Prey, **1**, p. 252, 1925 (monog.); Chapman, Bull. Amer. Mus. N. H., **55**, p. 223, 1926—Rio Suno, Ecuador.

Dinospizias pectoralis Cabanis, Journ. Orn., **22**, p. 228, 1874—Cantagallo, Rio de Janeiro; Hellmayr, Nov. Zool., **17**, p. 440, 1910—Borba, Rio Madeira; Dabbene, El Hornero, **1**, p. 99, 1918—Puerto Bertoni, Paraguay (June, 1916).

[1] The description reads "Parties superieures brunatres, les inferieures blanchatres, rayees de noir; gorge et poitrine rousses; bec brun; pieds jaunes. Taille, quatorze pouces. De l'Amerique meridionale." Nothing is said about the location of the type but it is more than likely that Drapiez's description was based on the same specimen in the Antwerp Museum discussed by Bonaparte a few years later.

[2] *"Circus"* (=*Buteo*) *pectoralis* Vieillot (Nouv. Dict. Hist. Nat., nouv. éd., **4**, p. 477, 1816, "dans les Indes Orientales") appears to be something quite different. The type is no longer extant (cf. Pucheran, Rev. Mag. Zool., (2), **2**, p. 95, 1850).

Nisus(?) *pectoralis* Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, p. 128, 1876 (monog.).

Cooperastur pectoralis Gurney, Ibis, 1881, p. 259—Sarayacu, Ecuador (crit.; meas.).

Range.—British Guiana,[1] eastern Ecuador (Sarayacu; Rio Suno), Brazil (São Gabriel, Rio Negro; Obidos; Pará; Borba, Rio Madeira; Bahia; Ypanema and Bauru, São Paulo; Cantagallo, Rio de Janeiro) and Paraguay (Puerto Bertoni, Alto Paraná).[2]

***Accipiter superciliosus superciliosus** (Linnaeus).[3] EYEBROWED ACCIPITER.

Falco superciliosus Linnaeus, Syst. Nat., 12th ed., **1**, p. 128, 1766—Surinam (descr. of transitional plumage).

Falco tinus Latham, Ind. Orn., **1**, p. 50, 1790—based on "Tiny Falcon" Latham, Gen. Syn. Bds., Suppl., p. 39, Cayenne (type in Leverian Museum).[4]

Sparvius subniger Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **10**, p. 319, June 21, 1817—"Guyane"; idem, Tabl. Enc. Meth., Orn., livr. 93, p. 1263, 1823 (type stated to be in Paris Museum); Pucheran, Rev. Mag. Zool., (2), **2**, p. 92, 1850 (crit.).

Sparvius minutus Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **10**, p. 328, June 21, 1817—Cayenne; idem, Tabl. Enc. Meth., Orn., livr. 93, p. 1267, 1823 (reprint); Pucheran, Rev. Mag. Zool., (2), **2**, p. 93, 1850 (crit.; type no longer in Paris Museum).

Nisus malfini Lesson, Traite d'Orn., livr. 1, p. 58, Feb., 1830—Cayenne (part, descr. of adult; type in Paris Museum); Pucheran, Rev. Mag. Zool., (2), **2**, p. 209, 1850 (crit.).

Falco ferrugineus Nordmann, in Erman's Reise, Naturhist. Atlas, p. 16, 1835—Brazil (type in Berlin Museum; cf. Stresemann, Orn. Monatsb., **30**, p. 88, 1922).

Nisus tinus Burmeister, Syst. Uebers. Th. Bras., **2**, (1), p. 70, 1855—Guiana; Schlegel, Mus. Pays-Bas, Astures, p. 33, 1862—Cayenne and Brazil; Ihering, Cat. Faun. Braz., **1**, p. 87, 1907—Cachoeira, São Paulo; Chros-

[1] An adult male in the British Museum collected by J. J. Quelch and J. V. McConnell before 1895 at an unspecified locality.

[2] *Material examined.*—British Guiana, 1.—Ecuador: Sarayacu, 1.—Brazil: Obidos, 1 (adult male, Feb. 20, 1907. F. Santos, British Museum); Borba, Rio Madeira, 1; Bahia, 1; Rio de Janeiro, 1; Ypanema, São Paulo, 1.

[3] It is with considerable reluctance that we are preserving Linnaeus's name, since the description contains the passage "Magnitudo picae" and all Latham's diagnosis of *Falco tinus* is likewise faulty, the crown of head being called "dusty white." We would rather reject both terms in favor of *S. subniger* Vieillot, about which there is no uncertainty at all, the type being in existence. Cf. also Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, p. 126, 1876.

[4] This bird, a tailless specimen, did not come to the Vienna Museum.

towski, Compt. Rend. Soc. Scien. Varsovie, **5**, No. 8, p. 456, 1912—Parana, Brazil.

Ierospizia tinus Bonaparte, Bull. Soc. Linn. Normandie, **2**, p. 29, 1857—Cayenne.

Accipiter tinus Pelzeln, Orn. Bras., **1**, p. 8, 1867—São Paulo (Ypanema, Porto do Rio Parana), Barra do Rio Negro (=Manaos), and Pará, Brazil; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 139, 1874—part, Guiana and Brazil; Salvin, Ibis, 1886, p. 501—Carimang River, British Guiana; Ihering, Rev. Mus. Paul., **3**, p. 349, 1899—Cachoeira, São Paulo; idem, l.c., **4**, p. 162, 1900—Cantagallo, Rio de Janeiro; Salvadori and Festa, Boll. Mus. Zool. Torino, **15**, No. 368, p. 29, 1900—Rio Santiago, eastern Ecuador; Berlepsch and Hartert, Nov. Zool., **9**, p. 114, 1902—La Priceon, Caura, Venezuela; Bertoni, Anal. Cient. Parag., Ser. 1, No. 3, p. 7, 1904—Puerto Bertoni, Paraguay; Berlepsch, Nov. Zool., **15**, p. 291, 1908—Cayenne; Reiser, Denks. Math.-Naturw. Kl. Akad. Wiss. Wien, **76**, p. 89, 1910, p. 203, 1923—Parnagua, Piauhy and Miritiba, Maranhão; Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 414, 1910—Alto Parana, Paraguay (ex Bertoni); Snethlage, Bol. Mus. Goeldi, **8**, p. 128, 1914—Benevides and Peixe-Boi, Pará; Cherrie, Sci. Bull., Mus. Brookl. Inst., **2**, p. 342, 1916—La Pricion, Caura, Venezuela; Stone, Proc. Acad. Nat. Sci. Phila., **80**, p. 154, 1928—Pará.

Hieraspizia tina Cabanis, Journ. Orn., **22**, p. 228, 1874—Cantagallo, Rio de Janeiro.

Nisus (?Hieraspizias) superciliosus? Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, p. 125, 1876—part, British Guiana (Demerara), Brazil (Bahia, Rio de Janeiro), and Venezuela (San Esteban) (monog.).

Accipiter superciliosus Hellmayr, Nov. Zool., **17**, p. 410, 1910—Marvins, Rio Machados, Brazil; idem, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **26**, (2), p. 96, 1912—Pará; Dabbene, Bol. Soc. Physis, **1**, p. 300, 1914—Misiones and Paraguay; Chubb, Bds. Brit. Guiana, **1**, p. 227, 1916—Supenaam River, Bartica, lower Mazaruni River, Arawai and Carimang River; Bangs and Penard, Bull. Mus. Comp. Zool., **62**, p. 35, 1918—vicinity of Paramaribo, Surinam; Swann, Syn. List Accip., p. 32, 1919 (in part); idem, Syn. Accip., p. 53, 1921 (in part); idem, Monog. Bds. Prey, **1**, p. 295, 1926 (monog., excl. of Panama); Sztolcman, Ann. Zool. Mus. Pol. Hist. Nat., **5**, p. 122, 1926—Vermelho and Therezina, Parana.

Accipiter collaris Swann, Auk, **38**, p. 357, 1921—part, Merida, Venezuela (specimen in Museum of Comparative Zoology only, examined).

Accipiter superciliosus superciliosus Chapman, Bull. Amer. Mus. N. H., **55**, p. 224, 1926—Rio Santiago, Ecuador; Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **12**, p. 459, 1929—Piauhy (Parnagua) and Maranhão (Miritiba); Peters, Bds. World, **1**, p. 218, 1931 (range); Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 409, 1936—Misiones; Pinto, Rev. Mus. Paul., **22**, p. 67, 1938—São Paulo (Cachoeira, Alto da Serra, Olympia) and Minas Geraes (Marianne).

Range.—From Venezuela (Merida, Caura) and the Guianas south through Brazil to Parana and the adjacent parts of Paraguay (Puerto

Bertoni) and Argentina (Misiones), west to eastern Ecuador (Rio Santiago; Sarayacu),[1] Peru (San Martin) and Matto Grosso.

Field Museum Collection.—6: Ecuador (Mera, Oriente, 1; Rio Capataza, Oriente, 1); Peru (Moyobamba, San Martin, 1; Rioja, San Martin, 1); Brazil (Boca Rio Ituqui, Pará, 1; Joinville, Santa Catharina, 1).

***Accipiter superciliosus fontanieri** Bonaparte.[2] FONTANIER'S ACCIPITER.

Accipiter fontainieri (sic)[3] Bonaparte, Compt. Rend. Acad. Sci. Paris, 37, (22), p. 810, for Nov. 28, 1853—no locality given (the type examined in

[1] Two adult and one young (in transitional plumage), from Sarayacu, are perfectly typical of the eastern form, agreeing with a series from British Guiana. Birds from various parts of Brazil are similar. A single adult from Venezuela does not differ either.

Additional material examined.—Venezuela: Merida, 1 (immature); San Esteban, Carabobo, 1 (adult female).—French Guiana: Cayenne, 1.—British Guiana: Bartica Grove, 1; Abary River, 1; Supenaam, 2; Demerara, 1; Arawai River, 1; lower Mazaruni River, 1; Carimang River, 1; Rupununi River, 1; Rio Takutu, 2; unspecified, 2.—Brazil: Pará, 1; Manaos, 1; Miritiba, Maranhão, 2; Parnagua, Piauhy, 1; Bahia, 3; Rio de Janeiro, 5; Ypanema, São Paulo, 1; Marvins, Rio Machados, Matto Grosso, 1.—Ecuador: Sarayacu, 3.

[2] *Accipiter superciliosus fontanieri* Bonaparte: Exceedingly close to the nominate race, but dusky barring of under parts generally somewhat wider and more sharply defined, the bars, in the adult male, besides being blacker, less grayish.

The large series of specimens now available for comparison shows the western race to be a very poor one. The supposedly smaller size amounts to very little, as may be gathered from the subjoined wing measurements. While adult males have indeed blacker bars beneath, the difference in width of these markings, especially in females and immature birds, is largely obliterated by individual variation.

The applicability of Bonaparte's term to the present form seems beyond dispute, since two adults from Remedios, situated on the Rio Ite, which flows into the lower Magdalena not far from the type locality, are indistinguishable from Veragua and Costa Rica specimens (*exitiosus*). A "Bogotá" skin, which probably originated in the Magdalena Valley, is likewise typical of this form. An extremely well-marked adult male obtained by W. Goodfellow in December, 1913, at Mindo (alt. 6,000 ft.) adds *A. s. fontanieri* to the fauna of western Ecuador.

The wing measurements of adults are as follows:

A. s. superciliosus.—Males: seven from British Guiana, 133–136; one from Maranhão (Miritiba), 132; one from Bahia, 137; two from Rio de Janeiro, 135, 135; one from eastern Ecuador (Sarayacu), 135. Females: three from British Guiana, 155, 162, 164; one from Venezuela (San Esteban), 164; one from eastern Ecuador (Sarayacu, 163; one from Bahia, 158; two from Rio de Janeiro, 153, 160.

A. s. fontanieri.—Males: one from Costa Rica, 133; one from Panama Railroad, 132; one from Remedios, Colombia, 130; one from Bogotá, 134; one from Mindo, Ecuador, 128. Females: one from Santiago de Veraguas, 150; one from Tado, Colombia, 149; one from Remedios, 155.

Additional material examined.—Costa Rica (unspecified), 1.—Panama: Santiago, Veraguas, 1; Panama Railroad, 1.—Colombia: Remedios, 2; Tado, 1; Santa Cruz, Magdalena, 1; Bogotá, 2.—Ecuador: Mindo, 1.

[3] First mis-spelled "fontainieri," the name was, in accordance with the discoverer's (Fontanier) orthography, corrected in Not. Orn. Coll. Delattre, in 1854.

the Paris Museum was obtained by M. Fontanier at Santa Cruz, Magdalena, Colombia; descr. of young); idem, Rev. Mag. Zool., (2), **5**, p. 578, 1853 (reprint).

Accipiter fontanieri Bonaparte, Not. Orn. Coll. Delattre, p. 5, 1854; Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **12**, p. 459 (note), 1929 (crit.).

Accipiter collaris (not of Sclater) Lawrence, Ann. Lyc. Nat. Hist. N. Y., **7**, p. 462, 1862—Panama Railroad line, Panama.

Accipiter tinus (not *Falco tinus* Latham) Sclater, Proc. Zool. Soc. Lond., 1866, p. 304—New Granada and Veragua (crit.); Salvin, l.c., 1867, p. 158—Santiago de Veragua, Panama (crit.); Sclater and Salvin, l.c., 1879, p. 541—Remedios, Rio Ite, Colombia; Cherrie, Proc. U. S. Nat. Mus., **14**, p. 537, 1891—Greytown, Nicaragua; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 51, 1899—Nicaragua (Greytown) to Panama and Colombia; Allen, Bull. Amer. Mus. N. H., **13**, p. 130, 1900—Las Nubes, Santa Marta, Colombia; Carriker, Ann. Carnegie Mus., **6**, p. 454, 1910—Costa Rica (Carrillo, Guapiles, El Hogar).

Accipiter superciliosus (not *Falco superciliosus* Linnaeus) Hellmayr, Proc. Zool. Soc. Lond., 1911, p. 1203—Tado, Pacific Colombia; Chapman, Bull. Amer. Mus. N. H., **36**, p. 241, 1917—Barbacoas (Narino) and Puerto Valdivia (lower Cauca), Colombia; Swann, Syn. List Accip., p. 32, 1919 (in part); idem, Syn. Accip., p. 53, 1921 (in part).

Accipiter superciliosus exiliosus Bangs and Penard, Proc. New Eng. Zool. Cl., **7**, p. 45, Feb. 19, 1920—Carrillo, Costa Rica (type in Museum of Comparative Zoology, Cambridge, Mass.); Todd and Carriker, Ann. Carnegie Mus., **14**, p. 147, 1922—Las Nubes and Santa Marta, Colombia (crit.); Swann, Monog. Bds. Prey, **1**, p. 296, 1926—Costa Rica to western Colombia; Bangs, Bull. Mus. Comp. Zool., **70**, p. 187, 1930 (crit.); Peters, Bds. World, **1**, p. 218, 1931—Costa Rica to Colombia; Griscom, Bull. Mus. Comp. Zool., **72**, p. 313, 1932—Obaldia, Panama; idem, l.c., **78**, p. 298, 1935—Panama.

Range.—Nicaragua (Greytown), Costa Rica (Carrillo, May 13; Guapiles, March 10; El Hogar, March) and Panama (Santiago de Veraguas; Panama Railroad; Obaldia) south to Colombia (west of the eastern Andes) and western Ecuador (Mindo).

Field Museum Collection.—2: Colombia (La Costa, Cauca, 1; "Bogotá," 1).

*Accipiter collaris Sclater.[1] COLLARED ACCIPITER.

Accipiter collaris (Kaup MS.) Sclater, Ibis, **2**, p. 148, pl. 6, 1860—Bogotá, Colombia (type in the British Museum examined); idem, Proc. Zool. Soc. Lond., 1866, p. 304—New Grenada; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 144, 1874—Bogotá; Salvin, Ibis, 1874, p. 321—Bogotá (list of known

[1] *Accipiter collaris* Sclater is remarkable both for its stout feet and its pattern of plumage. An immature male in the British Museum was taken on Nov. 28, 1906, in the Montanas del Moro, Venezuela, elevation 2,500 meters, which indicates that the species is an inhabitant of the Subtropical zone.

specimens); Gurney, l.c., 1875, p. 470 (crit.); Swann, Syn. List Accip., p. 33, 1919—Colombia (chars.); idem, Auk, **38**, p. 357, 1921—part, Merida, Venezuela (specimen in British Museum only); Stresemann, Journ. Orn., **72**, p. 436, 1924; Peters, Bds. World, **1**, p. 219, 1931—Colombia (Bogotá) and Venezuela (Andes of Merida); Conover, Fieldiana, Zool., **31**, p. 42, 1946 (disc.; plumages; range).

Nisus (?Hieraspizias) collaris Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, p. 127, 1876 (monog.).

Astur collaris Swann, Syn. Accip., p. 45, 1921—Colombia and Venezuela (crit.); idem, Monog. Bds. Prey, **1**, p. 250, 1925 (monog.).

Range.—From the Merida region of Venezuela through Colombia, west of the eastern Andes, to western Ecuador (Nanegal and Gualea, Pichincha).

Field Museum Collection.—6: Colombia, Cauca, El Tambo (La Costa, 1; Munchique, 3); Ecuador, Pichincha (Nanegal, 1; Gualea, 1).

*Accipiter poliogaster (Temminck).[1] GRAY-BELLIED GOSHAWK.

Falco poliogaster Natterer MS., Temminck, Nouv. Rec. Pl. Col., livr. 45, pl. 264 (adult), April, 1824—Brazil=Ypanema, São Paulo (type in the Leyden Museum).

Nisus poliogaster Lesson, Traite d'Orn., livr. 1, p. 62, Feb., 1830—part, descr. of adult;[2] Schlegel, Mus. Pays-Bas, Astures, p. 43, 1862—Brazil (note on type).

Accipiter poliogaster Pelzeln, Orn. Bras., **1**, p. 8, 1867—Ypanema, São Paulo; Stresemann, Journ. Orn., **72**, p. 436, 1924 (range); Peters, Bds. World, **1**, p. 219, 1931 (range); Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 408, 1936 (bibliog.; range); Pinto, Rev. Mus. Paul., **22**, p. 67, 1938—Porto do Sape, Rio Pardo (Rio Parana), Matto Grosso, Brazil, and Puerto

[1] *Accipiter poliogaster* (Temminck) bears some superficial likeness to *Micrastur mirandollei*, but may be recognized by less elevated maxilla; lack of every trace of yellow at base of mandible; very nearly smooth (instead of conspicuously hexagonally-scuted) tarsus; blackish slate pileum (not deep neutral gray, like back); much darker upper parts, the dorsal feathers being fuscous black, apically edged with slate gray, instead of uniform deep neutral gray, etc.

An adult female from British Guiana (*jardinei*) except for its larger size, is very much like the type of *A. poliogaster*, having the under wing coverts uniform pale grayish, and the sides of the head black like the crown. The bird from Allianca, we are told by Mr. Zimmer, who examined it at our request, is a male of the present species. It was erroneously recorded as *M. mirandollei*. Nothing is known about the breeding range of this species as not more than a dozen specimens exist in collections.

Additional material examined.—British Guiana: Essequibo River, 1.—Brazil: Amazon Valley, 1; Allianca, Rio Madeira, 1.—Paraguay: Puerto Bertoni, 1.—Argentina: Santa Ana, Misiones, 1.

[2] The young birds collected by A. de St. Hilaire, one in Rio Grande do Sul, the other at São Miguel, near São Joas d'El Rey, Minas Geraes, which we have examined in the Paris Museum, are *A. bicolor pileatus*.

Bertoni, Paraguay; Gyldenstolpe, K. Svensk. Vetensk. Akad. Handl., (3), **23**, p. 49, 1945—Bolivia (Victoria, El Beni), Brazil (Santarem) (disc.).

Astur poliogaster Sharpe, Cat. Bds. Brit. Mus., **1**, p. 120, 1874 (descr. of type); Bertoni, Rev. Inst. Parag., p. 11, 1907—Puerto Bertoni, Paraguay (spec. examined); Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 416, 1910—Misiones; idem, Bol. Soc. Physis, **1**, p. 299, 1914—Santa Ana, Misiones; Chubb, Bds. Brit. Guiana, **1**, p. 226, 1916—Essequibo River, British Guiana (crit.); Swann, Syn. List Accip., p. 27, 1919 (range); idem, Syn. Accip., p. 44, 1921 (range); Hellmayr, Nov. Zool., **28**, p. 182, 1921 (crit.); Todd and Carriker, Ann. Carnegie Mus., **14**, p. 149, 1922—Bonda, Santa Marta, Colombia (adult female, Apr. 26, 1899); Swann, Monog. Bds. Prey, **1**, p. 248, 1925—British Guiana to Paraguay (monog.).

Cooperastur poliogaster Gurney, Ibis, 1881, p. 258—Amazon Valley (crit.); Dabbene, Bol. Soc. Physis, **1**, p. 247, 1913—Santa Ana, Misiones; idem, l.c., **2**, p. 291, 1916—same locality; idem, El Hornero, **1**, p. 100, 1918—Paraguay (Puerto Bertoni) and Misiones (Santa Ana, Aug., 1912).

Urospizias jardinei Gurney, Ibis, (5), **5**, p. 97, pl. 3, Jan., 1887—hab. ign. (type in the Norwich Museum).

Astur jardinei Sharpe, Bull. Brit. Orn. Cl., **10**, p. lvi, 1900—British Guiana; Swann, Syn. List Accip., p. 27, 1919—British Guiana.

Accipiter mirandollei (not *Astur mirandollei* Schlegel) Bertoni, Anal. Cient. Parag., Ser. 1, No. 3, p. 6, 1904—Puerto Bertoni, Paraguay.

Micrastur mirandollei Hellmayr, Nov. Zool., **17**, p. 409, 1910—Allianca, Rio Madeira.

Range.—Scattered records from Colombia (Bonda, Aug. 26), British Guiana (Essequibo River), Amazonas (Itacoatiara; Allianca, Rio Madeira), Goyaz (Rio São Miguel), Matto Grosso (Porto do Sape, Rio Pardo, July), São Paulo (Ypanema), Bolivia (Victoria, El Beni; Rio Surutu, Santa Cruz), Paraguay (Puerto Bertoni, Apr. 15), and Misiones (Santa Ana, Aug. 21).

Field Museum Collection.—3: Brazil (Rio São Miguel, Goyaz, 1; Itacoatiara, Amazonas, 1); Bolivia (Rio Surutu, Santa Cruz, 1).

***Accipiter striatus velox** (Wilson). SHARP-SHINNED HAWK.

Falco velox Wilson, Amer. Orn., **5**, p. 116, pl. 45, fig. 1, after Feb. 12, 1812—banks of the Schuylkill River, near Philadelphia, Pennsylvania (no type in existence).

Falco pennsylvanicus Wilson, Amer. Orn., **6**, p. 13, pl. 46, fig. 1, after Aug. 12, 1812—neighborhood of Philadelphia, Pennsylvania (no type in existence).

Sparvius tricolor Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **10**, p. 328, June 21, 1817—"l'Amerique meridionale" (type in Paris Museum); Pucheran, Rev. Mag. Zool., (2), **2**, p. 94, 1850—"Cayenne" (crit.;=young).

Sparvius ardosiaceus Vieillot, Tabl. Enc. Meth., Orn., livr. 93, p. 1275, 1823—"Etats-Unis" (no type indicated).

Nisus pacificus Lesson, Echo du Monde Sav., **12**, No. 46, col. 1086, June 19, 1845—Acapulco to California (type evidently from San Blas, Nayarit, Mexico; presumably in coll. of R. P. Lesson, present location unknown); idem, Oeuvres Compl. Buffon, ed. Lévéque, **20**, (Descr. Mamm. Ois.), p. 177, 1847 (reprint).

Accipiter fuscus Lawrence, Ann. Lyc. Nat. Hist. N. Y., **9**, p. 134, 1868—El Mojon, Costa Rica; Salvin, Proc. Zool. Soc. Lond., 1870, p. 216—Volcan de Chiriqui, Panama; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 135, 1874 (monog.).

Nisus fuscus (not *Falco fuscus* Miller, 1777) Ridgway, in Baird, Brewer and Ridgway, Hist. N. Amer. Bds., **3**, p. 224, 1874 (monog.); Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, p. 110, 1876 (monog.).

Accipiter velox Ferrari-Perez, Proc. U. S. Nat. Mus., **9**, p. 168, 1886—Tecali, Puebla; Herrera, La Naturaleza, (2), **1**, p. 176, 1888—Valley of Mexico (fall and winter); Cherrie, Auk, **9**, p. 328, 1892—San José, Costa Rica (Jan. 8, 1884); Allen, Bull. Amer. Mus. N. H., **5**, p. 34, 1893—Granados and Pachico, Sonora; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 48, 1899—Mexico, Guatemala, Nicaragua (Blewfields), Costa Rica (El Mojon, San José) and Panama (Volcan de Chiriqui); Riley, in Shattuck, The Bahama Islands, p. 362, 1905—New Providence; Dearborn, Field Mus. Nat. Hist., Orn. Ser., **1**, p. 81, 1907—Lake Atitlan, Guatemala (April 8); Carriker, Ann. Carnegie Mus., **6**, p. 455, 1910—Costa Rica (Guayabo, Cariblanco de Sarapique, Volcan de Irazu, Escazu); Phillips, Auk, **28**, p. 73, 1911—Montelunga (Oct. 12), Altamira (Dec. 20), and Galindo (April 22), Tamaulipas, Mexico; Grinnell, Univ. Calif. Pub. Zool., **32**, p. 107, 1929—Lower California (winter visitor); van Rossem, Trans. San Diego Soc. N. H., **6**, p. 242, 1931—Sonora (Tecoripa, Saric, Tesia; Sept., Dec., Mar.).

Accipiter velox rufilatus Ridgway, Proc. U. S. Nat. Mus., **11**, p. 92, 1888—"western North America, east to the Rocky Mountains, north to Kodiak, south into Mexico" (type from Fort Bridger, Wyoming, in U. S. National Museum; cf. Nelson, Proc. Biol. Soc. Wash., **18**, p. 122, 1905).

Accipiter velox pacificus Nelson, Proc. Biol. Soc. Wash., **18**, p. 122, 1905 (nomencl.); Swann, Monog. Bds. Prey, **1**, p. 288, 1926—Pacific coast of United States, wintering to Mexico.

Accipiter fuscus fuscus Swann, Syn. List Accip., p. 31, 1919—North America to Guatemala; idem, Syn. Accip., p. 52, 1921 (range).

Accipiter striatus velox Peters, Bds. World, **1**, p. 221, 1931 (range); van Rossem, Bull. Mus. Comp. Zool., **77**, p. 428, 1934—Alancor, Sonora, and Bravo, Chihuahua; Griscom, l.c., **78**, p. 298, 1935—Volcan de Chiriqui, Panama; Dickey and van Rossem, Field Mus. Nat. Hist., Zool. Ser., **23**, p. 108, 1938—El Salvador (Puerto de Triunfo, Jan. 1; Rio San Miguel, Feb. 5; San Salvador, Mar. 13, Apr. 25); Traylor, Field Mus. Nat. Hist., Zool. Ser., **24**, p. 202, 1941—Chichen Itza, Yucatan; Wetmore, Proc. U. S. Nat. Mus., **89**, p. 532, 1941—Panajachel, Guatemala; van Rossem, Occ. Pap. Mus. Zool. Louisiana State Univ., **21**, p. 54, 1945—Sonora (distrib.).

Accipiter striatus perobscurus Snyder,[1] Occ. Pap. Roy. Ontario Mus. Zool., No. 4, p. 4, July 14, 1938—McClinton Creek, Massett Inlet, Graham Island, Queen Charlotte Islands (type in Royal Ontario Museum of Zoology, Toronto, Canada).

Accipiter striatus suttoni van Rossem,[2] Auk, **56**, p. 127, col. pl. 6, April 7, 1939—Mesa del Chipinque, near Monterey, Nuevo Leon, Mexico, altitude about 4,500 feet (type in the Sutton Collection); Sutton and Burleigh, Condor, **43**, p. 159, 1941—same locality (add. notes on dist. chars.); Sutton, Pettingill and Lea, Wilson Bull., **54**, p. 199, pl., 1942—same locality; van Rossem, Occ. Pap. Mus. Zool. Louisiana State Univ., **21**, p. 55, 1945—Tesia, Sonora (Dec.).

Range.—Breeds from northwestern Alaska and Mackenzie east to Quebec and Newfoundland, south to central California, Texas, the Gulf coast and northern Florida; winters from British Columbia and the northern border of the United States, south through Mexico and Central America to Costa Rica (various records) and western Panama (one record from Volcan de Chiriqui); accidental in the Bahamas.[3]

Field Museum Collection.—182: Alaska (Circle City, 1); Yukon Territory (Yukon River, 2); British Columbia (Queen Charlotte Islands, 1; Graham Island, 1; Comox, Vancouver Island, 7; Victoria, 1; Vancouver, 2; Princeton, 1; Okanagan, 2); Alberta (Beaverhill Lake, 1); Saskatchewan (Maple Creek, 2); Oregon (Mitchell, Polk County, 1; Princeville, 2; Jackson County, 2; Salem, 1); California (Red Bluff, 1; Thermal, 1; Clipper Gap, 1; Alameda, 5; Berkeley, 1; Enterprise County, 1; Monterey County, 7; West Port, 1; Los Angeles County, 2; San Diego County, 3; San Mateo, 1; San José, 1); Arizona (Palmerlee, 1; Huachuca Mountains, 2; Tucson, 3);

[1] *Accipiter striatus perobscurus* Snyder: The birds of the coastal region of British Columbia and southern Alaska have recently been separated under this name. In adults the white of the belly is said to be reduced, and in winter *extreme* examples are said to be darker on the dorsal surface. In juveniles the dorsal region is supposed to *average* darker and the under surface to have the dark areas in preponderance over the light ones. The specimens in Field Museum from the range assigned to this supposed race appear to be just as variable and in no way to differ from a series taken in eastern North America.—B.C.

[2] *Accipiter striatus suttoni* van Rossem: Differs from *A. s. velox* by having "underparts paler, redder (less brownish) and very much less maculated; chest, lateral underparts and thighs immaculate, or nearly so, light red, between 'tawny' or 'ochraceous tawny' and 'vinaceous russet' (of Ridgway, 1912)."

None of our Mexican birds show the characters assigned to this proposed race, except an immature from Michoacan, taken August 13, which has the flanks and thighs immaculate rufous. Another immature from Coahuila, taken April 13, however, has no rufous whatsoever on the under parts.—B.C.

[3] After examining some eighty specimens I am unable to distinguish a western race (*pacificus*), though admitting that some individuals are more cinnamomeous underneath than the average from the eastern United States.—C.E.H.

Idaho (Coolin, 1; Coeur d'Alene, 2); Montana (Miles City, 1); Colorado (Coulter County, 1; Garfield County, 2); Texas (Gainesville, 1; Tivoli, 1); North Dakota (Ramsey County, 2; Towner County, 1); Arkansas (Fayetteville, 3; Winslow, 1); Wisconsin (Beaver Dam, 6); Illinois (Lake County, 2; Naperville, 1; Cook County, 2); Indiana (Liverpool, 1); Nova Scotia (Seabright, 1); Maine (Lincoln, 2); Massachusetts (Burlington, 1); Connecticut (New London County, 3; East Hartford, 2; Litchfield County, 7; New Haven County, 46; Stamford, 4; Bridgeport, 1; Newtown, 1); New York (Suffolk County, 2); New Jersey (Orange, 3); North Carolina (Raleigh, 1); Georgia (Roswell, 2); Florida (Highlands County, 1; Amelia Island, 3; Palm Beach, 1; Key West, 1); Mexico (El Oro, Lower California, 1; Sabinas, Coahuila, 1; Tampico, Tamaulipas, 2; Tancitaro, Michoacan, 1; Iguala, Guerrero, 2; Tutla, Oaxaca, 1; Chichen Itza, Yucatan, 1); Guatemala (Lake Atitlan, 1; Mixco, Guatemala, 1; Tajamulco Volcano, San Marcos, 1); El Salvador (San Salvador, San Salvador, 1); Costa Rica (Volcan Turrialba, Cartago, 1).

***Accipiter striatus striatus** Vieillot. HISPANIOLAN SHARP-SHINNED HAWK.

Accipiter striatus Vieillot, Hist. Nat. Ois. Amer. Sept., **1**, p. 42, pl. 14, 1807—Saint Domingue (type in coll. of P. L. Vieillot); Riley, Proc. Biol. Soc. Wash., **23**, p. 77, 1910—part, Haiti.

Falco viellotinus (sic) Shaw, Gen. Zool., **7**, (1), p. 204, 1809—based on "Le Petit Malfini" Sonnini, in Buffon, Hist. Nat. Gen. et Part., **39**, p. 67—Santo Domingo (ex Vieillot's MS.).

Nisus fuscus (not *Falco fuscus* Miller) Cory, Bull. Nutt. Orn. Cl., **6**, p. 154, 1881—Haiti.

Accipiter fringilloides (not of Vigors) Cory, Bds. Haiti and San Domingo, p. 120, col. pl., 1884—Le Coup, Haiti; idem, Bds. W. Ind., p. 199, 1889—part, Haiti and San Domingo; idem, Cat. W. Ind. Bds., p. 98, 1892—part, Haiti and San Domingo; idem, Auk, **12**, p. 279, 1895—San Domingo; Cherrie, Field Columb. Mus., Orn. Ser., **1**, p. 22, 1896—Honduras and Catare (descr. of adult and young); Verrill, Proc. Acad. Nat. Sci. Phila., 1909, p. 357—Miranda.

Accipiter striatus striatus Wetmore, Proc. Biol. Soc. Wash., **27**, p. 120 (in text), 1914—San Domingo (chars.); Peters, Bull. Mus. Comp. Zool., **61**, p. 399, 1917—Bulla, Dominican Republic; Swann, Monog. Bds. Prey, **1**, p. 289, 1926 (monog.); Bond, Proc. Acad. Nat. Sci. Phila., **80**, p. 492, 1928—Haiti; Danforth, Auk, **46**, p. 361, 1929—La Vega; Moltoni, Atti Soc. Ital. Sci. Nat., **68**, p. 319, 1929—San Juan, Haiti; Wetmore and Swales, Bull. U. S. Nat. Mus., **155**, p. 108, 1931—Hispaniola (monog.); Peters, Bds. World, **1**, p. 221, 1931—Hispaniola; Wetmore and Lincoln,

Proc. U. S. Nat. Mus., **82**, (25), p. 20, 1933—Hispaniola (La Hotte, Pic de Macaya).

Accipiter fuscus fringilloides Swann, Syn. List Accip., p. 31, 1919—part, Haiti.

Accipiter fuscus striatus Swann, Syn. Accip., p. 52, 1921—San Domingo.

Range.—Island of Hispaniola, Greater Antilles.

Field Museum Collection.—4: Hispaniola (Catare, Santo Domingo, 1; Honduras, Santo Domingo, 2; Le Coup, Petionville, Haiti, 1).

***Accipiter striatus fringilloides** Vigors.[1] CUBAN SHARP-SHINNED HAWK.

Accipiter fringilloides Vigors, Zool. Journ., **3**, (11), p. 434, Dec., 1827—neighborhood of Havana, Cuba (type in coll. of N. A. Vigors, its present location unknown); Lawrence, Ann. Lyc. Nat. Hist. N. Y., **7**, p. 255, 1860—Cuba (chars.; descr. of adult and young); Gundlach, in Poey, Repert. Hist. Nat. Cuba, **1**, p. 224, 1865—Cuba; idem, Journ. Orn., **19**, p. 368, 1871—Cuba (habits; descr. of young); Sharpe, Cat. Bds. Brit. Mus., **1**, p. 135 (note), 1874—Cuba; Cory, Bds. W. Ind., p. 199, 1889—part, Cuba; idem, Cat. W. Ind. Bds., p. 98, 1892—part, Cuba; Barbour, Mem. Nutt. Orn. Cl., **6**, p. 45, 1923—Cuba (Pico Turquino, near Yara, etc.).

Nisus fringilloides d'Orbigny, in Sagra, Hist. Ile Cuba, Orn., p. 18, 1839—Cuba (ex Vigors); Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, p. 117, 1876—Cuba (monog.).

Astur fuscus (not *Falco fuscus* Miller) Lembeye, Av. Cuba, p. 16, pl. 3, fig. 1, 1850—Cuba (descr.).

Nisus fuscus Lembeye, Av. Cuba, p. 128, 1850—Cuba; Gundlach, Journ. Orn., **2**, 1854, Extraheft, p. lxxxiii, 1855—Cuba (one adult female).

Accipiter striatus (not of Vieillot) Riley, Proc. Biol. Soc. Wash., **23**, p. 77, 1910—part, Cuba.

Accipiter striatus fringilloides Wetmore, Proc. Biol. Soc. Wash., **27**, p. 120, 1914—Guantanamo, Guawa, San Diego de los Banos, and Bayamo, Cuba (chars.); Swann, Monog. Bds. Prey, **1**, p. 289, 1926—Cuba (monog.); Peters, Bds. World, **1**, p. 221, 1931—Cuba.

Accipiter fuscus fringilloides Swann, Syn. List Accip., p. 31, 1919—part, Cuba; idem, Syn. Accip., p. 52, 1921—Cuba.

Accipiter velox (not *Falco velox* Wilson) Barbour, Mem. Nutt. Orn. Cl., **6**, p. 45, 1923—Sierra de Yateras, Cuba (ex Gundlach).

[1] *Accipiter striatus fringilloides* Vigors, according to Wetmore, differs from the nominate race by lighter and grayer (deep neutral gray instead of dark to dusty neutral gray) upper parts; mostly white tibial feathers, with merely faint bars of mouse gray; duller, less reddish (rood brown instead of hazel) sides of upper breast; distinctly reddish forehead; and absence of the concealed white spots on the inner tertials.

However, the two specimens (both immatures) in Field Museum have the white spots on the tertials.

Range.—Island of Cuba, Greater Antilles.

Field Museum Collection.—2: Cuba (Los Palacios, Pinar del Rio, 1; unspecified, 1).

Accipiter striatus venator Wetmore.[1] PUERTO RICAN SHARP-SHINNED HAWK.

Accipiter striatus venator Wetmore, Proc. Biol. Soc. Wash., **27**, p. 119, July 10, 1914—Cerro Gordo, Maricao, Porto Rico (type in U. S. National Museum); Swann, Monog. Bds. Prey, **1**, p. 290, 1926—Puerto Rico (ex Wetmore); Wetmore, Sci. Surv. Porto Rico and Virgin Islands, **9**, p. 320, 1927—Puerto Rico; Peters, Bds. World, **1**, p. 221, 1931—western Puerto Rico.

Accipiter fuscus venator Swann, Syn. Accip., p. 52, 1921—Puerto Rico.

Range.—Island of Puerto Rico, Greater Antilles.

***Accipiter erythronemius chionogaster** Kaup.[2] WHITE-CHESTED ACCIPITER.

Nisus (seu *Accipiter*) *chionogaster* Kaup, Proc. Zool. Soc. Lond., **19**, 1851, p. 41, pub. Oct. 28, 1852—Coban, Guatemala (co-types in Derby Collection, now in Liverpool Museum).

Accipiter erythrocnemis (not *Nisus erythronemius* Kaup) Sclater and Salvin, Ibis, 1859, p. 218—Guatemala; Salvin, Ibis, 1861, p. 140—Vera Paz, Guatemala; Sclater, Proc. Zool. Soc. Lond., 1866, p. 303—part, Guatemala.

Accipiter chionogaster Sclater and Salvin, Exot. Orn., **1**, p. 27, pl. 14, 1867—Guatemala (Lanquin, Choctum, San Geronimo, Coban, and below Duenas); Sharpe, Cat. Bds. Brit. Mus., **1**, p. 148, 1874—"Caracas"[3] and Guatemala; Ridgway, Proc. U. S. Nat. Mus., **10**, p. 583, 1887—Trujillo, Honduras; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 50, 1899—Guatemala (Coban, Choctum, Lanquin, San Geronimo, Volcan de Fuego, Medio Monte, Savanna Grande, Sierra de las Minas), Honduras (Trujillo), and

[1] *Accipiter striatus venator* Wetmore: Nearest to *A. s. striatus*, but much darker (dusky neutral gray) above; more deeply colored below, with the black shaft stripes to the feathers more strongly defined; thigh more rufescent (hazel barred with white); black bars on upper side of tail sharply defined instead of indistinct. Adult male (only known specimen): wing, 145; tail, 116 mm.

[2] *Accipiter erythronemius chionogaster* Kaup: Separable from the white-bellied variety of *A. e. ventralis* (*"salvini"*) by darker (dark mouse-gray to dark neutral gray) upper parts; more purely white under parts with never more than a few criniform streaks on throat and foreneck and much paler (light buff to pinkish buff) tibial feathers; juvenile plumage distinguishable by much paler thighs; much narrower and paler rufescent edges to dorsal plumage; and anterior under parts rarely with more than narrow shaft-streaks of dusky.

Additional material examined.—Guatemala: Choctum, 1; Lanquin, 1; Medio Monte, 1; Savanna Grande, 1; San Geronimo, 1; Volcan de Fuego, 1; Sierra de las Minas, 2.—Honduras: San Pedro, 1.—Nicaragua: Matagalpa, 2; San Rafael del Norte, 6.

[3] Erroneous entry. The specimen is from Nicaragua and was acquired from Auguste Salle.

Nicaragua (Matagalpa, San Rafael del Norte, Santa Cruz, Rio Coco); Dearborn, Field Mus. Nat. Hist., Orn. Ser., 1, p. 82, 1907—near Tecpam, Guatemala; Swann, Syn. List Accip., p. 35, 1919—Guatemala and Nicaragua; Stresemann, Journ. Orn., 72, p. 436, 1924 (range); Stone, Proc. Acad. Nat. Sci. Phila., 84, p. 299, 1932—Cantarranas, Honduras; Griscom, Ibis, 1935, p. 810—Sierra de la Minas, Guatemala.

Nisus chionogaster Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., 2, p. 122, 1876—"Trinidad or Venezuela" [1] and Guatemala (monog.).

Accipiter salvini (not of Ridgway) Salvin and Godman, Ibis, 1892, p. 328—Matagalpa, Nicaragua.

Accipiter chionogaster chionogaster Swann, Syn. Accip., p. 58, 1921—Guatemala and Nicaragua; idem, Monog. Bds. Prey, 1, p. 317, 1926 (monog.); Griscom, Bull. Amer. Mus. N. H., 64, p. 159, 1932—Finca La Primavera and Monocastenango, Guatemala.

Accipiter erythronemius chionogaster Peters, Bds. World, 1, p. 221, 1931—Guatemala and Nicaragua; Dickey and van Rossem, Field Mus. Nat. Hist., Zool. Ser., 23, p. 108, 1938—Los Esesmiles and San José de Sarare, El Salvador (habits).

Range.—Tropical zone of Guatemala, Honduras (Trujillo; Cantarranas; San Pedro);[2] El Salvador and Nicaragua.[3]

Field Museum Collection.—6: Guatemala (Tecpam, Chimaltenango, 1); Honduras (Las Flores, Tegucigalpa, 1); Nicaragua (Matagalpa, Matagalpa, 1; San Rafael del Norte, Matagalpa, 3).

*Accipiter erythronemius ventralis Sclater.[4] RED-CHESTED ACCIPITER.

Accipiter ventralis Sclater, Proc. Zool. Soc. Lond., 1866, p. 203—Bogotá, Colombia (type in the Norwich Museum); Sclater and Salvin, Exot. Orn., p. 25, pl. 13, 1867—Bogotá; iidem, Proc. Zool. Soc. Lond., 1870, pp. 782, 788—Merida, Venezuela (crit.); Sharpe, Cat. Bds. Brit. Mus.,

[1] This specimen in the Salvin–Godman Collection was labelled as having been purchased of A. Boucard, on Aug. 22, 1873. It is a Guatemalan (Vera Paz) trade skin.

[2] An adult female obtained by H. Wittkugel on June 14, 1890, in the Brunswick Museum examined.

[3] No representative of this Hawk is found in either Costa Rica or Panama.

[4] *Accipiter erythronemius ventralis* Sclater, unlike its two relatives, which are remarkably uniform in both adult and juvenile plumage, exhibits an extraordinary amount of individual variation, which gave rise to the separation of several "species" and "races." While it is now pretty well established that *A. nigroplumbeus* is nothing but a melanistic mutation of the adult male, we are able to show that *A. salvini* is merely the lightest "extreme" in the long chain of variations leading to the rufous-bellied "phase" described as *A. ventralis.* This is conclusively demonstrated by a series of nearly twenty specimens from the Merida region of Venezuela in the British Museum, when compared with twenty-five from the Colombian and Ecuadorian Andes in the same collection.

Considering adult birds first, it may be said that a male from Valle (May 20) typically represents what has passed under the name *A. salvini.* It is nearly

1, p. 149, 1874—Colombia (Bogotá, Concordia) and Peru (Cosnipata); Sclater and Salvin, Proc. Zool. Soc. Lond., 1879, pp. 541, 637—Colombia (Retiro, Concordia, Medellin, Remedios) and Bolivia (Tilotilo, Yungas); Hartert, Nov. Zool., 5, p. 605, 1902—Ibarra, Ecuador; Berlepsch and Stolzmann, Ornis, 13, p. 124, 1906—Rio Cadena, Marcapata, Peru; Chapman, Bull. Amer. Mus. N. H., 36, p. 242, 1917—San Antonio, Barro Blanco, Andalucia, and Fomeque, Colombia; Stresemann, Journ. Orn., 72, p. 436, 1924—western Colombia to northwestern Bolivia; Chapman, Bull. Amer. Mus. N. H., 55, p. 224, 1926—Bucay, Naranjo, and Anito, Ecuador (crit.).

? Nisus striatus (not *Accipiter striatus* Vieillot) d'Orbigny, Voy. Amér. Mérid., Ois., p. 88, 1835—Yuaracares, Bolivia (cf. Hellmayr, Nov. Zool., 28, p. 180, 1921).

Accipiter erythrocnemius (not *Nisus erythronemius* Kaup) Sclater, Proc. Zool. Soc. Lond., 23, p. 134, 1855—Bogotá; idem, l.c., 28, p. 96, 1860—Nanegal, Ecuador.

Accipiter sp. Sclater and Salvin, Proc. Zool. Soc. Lond., 1868, pp. 629, 632—Venezuela.

Accipiter nigroplumbeus Lawrence, Ann. Lyc. Nat. Hist. N. Y., 9, p. 270, 1869—Quito Valley, Ecuador (type in Vassar College Museum, Poughkeepsie, N. Y., now in the American Museum of Natural History, New York; cf. Chapman, Bull. Amer. Mus. N. H., 55, p. 224, 1926); Orton, Amer. Natur., 4, p. 711, 1871—Valley of Quito; Salvin, Ibis, 1874, p. 325 (crit.; note on type).

uniform white beneath with just a few criniform streaks of dusky on sides of breast. Next comes Ridgway's type (of *salvini*), an adult female, with distinct, dusky shaft-streaks on the under parts from throat to upper abdomen and strong blackish brown striations on axillaries and under wing coverts. Then follow two males from Valle (March 26; June 7), with the markings reduced to short streaks on throat and breast, but with a pinkish buff tinge and some zig-zag cross-bands of dusky on sides of chest (thus closely resembling *erythronemius*). A female from Escorial (October 15) has the throat (especially laterally) and sides of breast strongly washed with pinkish cinnamon, the breast showing a number of broad, mouse gray cross bars. Next comes a male from Escorial (December 14), having the chest washed with dull grayish and buffy, the breast and sides banded with dusky and tinged with pinkish buff, passing into orange-cinnamon on the sides. This bird is inseparable from an Ecuadorian male (Monji). A female from Paramo de Conejos (June 18) is still darker, the under surface being dingy pinkish buff barred with grayish and white, with the sides pinkish cinnamon, and cannot be distinguished from one of the Bogotá skins. A male from Merida (Goering coll.) has an even more pinkish buff chest underlaid and barred with gray, and the sides orange cinnamon, and is exactly like a male from Intag, Ecuador. At the end of the series stands a female from Montanas de la Sierra (Aug. 11) with light drab breast, nearly mikado brown flanks and tibial feathers, and only obsolete grayish bars on abdomen. It is an average example of *ventralis*, as found in Colombia. The ground color of axillars and under wing coverts varies in accordance with the coloring of the ventral surface from white to light pinkish cinnamon. The juvenile plumage likewise shows every gradation from a (creamy) white-bellied longitudinally-streaked stage (*salvini*) to the *ventralis* type, having the under parts profusely and boldly spotted and barred with rufescent brown and dark gray. Among nine adults from the Bogotá region, two are not distinguishable from the type of *A. salvini*, another cannot be told from Goering's Merida bird and the remaining ones represent various stages of "*ventralis*." An adult female from Remedios is just as decidedly "*salvini*" as one from Medellin is "*ventralis*." Of five Ecuadorian adults, a male from Lita is "*salvini*," being inseparable from one of the Valle

Nisus nigroplumbeus Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, p. 122, 1876 (ex Lawrence).

Nisus ventralis Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, p. 120, 1876—Venezuela (Merida), Colombia and Ecuador (monog.).

Nisus salvini Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, (2), p. 121, April 1, 1876—Merida, Venezuela (type in Salvin-Godman Coll., now in British Museum, examined).

Accipiter erythrocnemis Taczanowski, Proc. Zool. Soc. Lond., 1879, p. 241—Shanyn, Peru; idem, l.c., 1880, p. 211—Cutervo, Peru; idem, Orn. Per., **1**, p. 163, 1884—Peru (Shanyn, Tambillo, Cutervo); Lönnberg and Rendahl, Ark. Zool., **14**, (25), p. 35, 1922—Pomasqui, above Nono, Mojanda and Niebli, Ecuador.

Accipiter salvini Swann, Syn. List Accip., p. 35, 1919—Venezuela (chars.; crit.); idem, Auk, **38**, p. 358, 1921—Escorial, Montanas "Conefos" (=Conejos), "Blechitera" (=Hechisera), and Valle, Merida; Todd and Carriker, Ann. Carnegie Mus., **14**, p. 148, 1922—Cincinnati and Cerro de Caracas, Santa Marta, Colombia; Stresemann, Journ. Orn., **72**, p. 436, 1924—Santa Marta and Andes of Merida.

Accipiter ventralis ventralis Swann, Syn. List Accip., p. 35, 1919—Venezuela to Colombia; idem, Syn. Accip., p. 58, 1921—Venezuela and Colombia to northwestern Bolivia; idem, Auk, **38**, p. 358, 1921—Valle and El Escorial, Merida (crit.); Lönnberg and Rendahl, Ark. Zool., **14**, (25), p. 34, 1922—Piganta (near Mojanda) and near Carapungo, Ecuador (crit.); Swann, Monog. Bds. Prey, **1**, p. 319, 1926 (monog.).

birds (June 7); one from Monje is practically like Goering's specimen from Merida; the others are of the "*ventralis*" type, one being even darker (russet) underneath than any other example we have seen.

An adult female from southern Peru (Ccachupata) and three adults from Bolivia are of the average "*ventralis*" coloration and can be matched by various Bogotá skins.

Turning now to the other extremity of the range, we find that six out of seven birds from the Caracas region of Venezuela are typically "*salvini*," while one, in juvenile dress, is a very characteristic "*ventralis*." It results from the preceding that there is no stable difference in coloration between the populations of Venezuela, Colombia and Ecuador, "*salvini*" and "*ventralis*" together, with an unbroken chain of intermediates, being found alongside each other throughout that range. However it cannot be denied that the various types of coloring do not occur everywhere in the same proportion. The "*salvini*" type predominates in the Venezuelan north coast mountains; constitutes about half of the population in the Merida region; is not infrequent in the east Colombian Andes; and springs up occasionally in the more westerly parts of Colombia and in western Ecuador. It has not yet been recorded from either Peru or Bolivia. On the other hand, the mutation with mostly dark gray under parts (*nigroplumbeus*) is only known from the Cauca Valley of Colombia and Ecuador. To provide these populations with different names would serve no practical purpose, since a large number of individuals could be identified only through the localities on their labels.

Additional material examined.—Venezuela: Caracas region: Caracas, 3, Galipan, Cerro del Avila, 3, Silla de Caracas, 1; Merida region: Merida, 3, Valle, 9, Escorial, 4, Carbonera, 1, Paramo Conejos, 1, Montanas de la Sierra, 1, Nevados, 1.—Colombia: Anolaima, 2, Bogotá, 11, Remedios, 1, Medellin, 1, Retiro, Concordia, 2.—Ecuador: Lita (Prov. Imbabura), 1, Intaq, 2, Monji, 2, Quito Valley, 3, near Piganta, west side of Mt. Mojanda, 1, Balya, 1, unspecified (*A. nigroplumbeus*), 1.—Peru: Ccachupata (alt. 11,000 ft.), Dept. Cuzco, 1, Marcapata, 1.—Bolivia: Tilotilo, 1, Sandillani, 1, Chulumani, 1.

Accipiter ventralis nigroplumbeus Swann, Syn. List Accip., p. 35, 1919—Ecuador and Peru; idem, Syn. Accip., p. 59, 1921 (range); Lönnberg and Rendahl, Ark. Zool., **14**, (25), p. 34, 1922—Pichincha, western side of Mojanda, near Gualea, and Carapungo, Ecuador (crit.); Swann, Monog. Bds. Prey, **1**, p. 320, 1926—Ecuador and Peru.

Accipiter ethronemius (sic) *salvini* Swann, Syn. Accip., p. 58, 1921—Venezuela.

Accipiter chionogaster venezuelensis Swann,[1] Syn. Accip., p. 58, Sept. 28, 1921—Escorial, Merida, Venezuela (type in coll. of H. Kirke Swann, now in Museum of Comparative Zoology, Cambridge, Mass.; cf. Bangs, Bull. Mus. Comp. Zool., **70**, p. 188, 1930); idem, Auk, **38**, No. 3, "July," p. 358, pub. Oct. 5, 1921—Escorial; idem, Monog. Bds. Prey, **1**, p. 318, 1926—Escorial.

Accipiter erythronemius salvini Swann, Monog. Bds. Prey, **1**, p. 316, 1926 (monog.); Chapman, Bull. Amer. Mus. N. H., **55**, p. 224, 1926—western Ecuador; Peters, Bds. World, **1**, p. 221, 1931 (range).

Accipiter erythronemius ventralis Peters, Bds. World, **1**, p. 221, 1931 (range); Zimmer, Field Mus. Nat. Hist., Zool. Ser., p. 245, 1938—Chinchao, Huánuco, Peru; Peters and Griswold, Bull. Mus. Comp. Zool., **92**, p. 291, 1943 (chars.).

Range.—Western Venezuela (north coast mountains [Sucre] to the Sierra of Merida) and the Andes from Colombia (including Santa Marta Mountains) through Ecuador and Peru to western Bolivia (Cochabamba).

Field Museum Collection.—36: Venezuela (Mount Turumiquire, Sucre, 1); Colombia (Paramo de Tama, Santander, 1; El Tambo, Munchique, Cauca, 16; Coconuco, Cauca, 2; unspecified, 1); Ecuador (Cerro Tanlagua, Pichincha, 2; Volcan Pichincha, 1; Rio Nambillo, Pichincha, 1; Quinchicoto, Tungaragua, 1; Verde Cocha, Occidente, 1; Baños Azuay, 1; San Martin, Azuay, 1; Huaico, Loja, 1; Loja Valley, 1; Casanga, Napo-Pastaza, 1); Peru (Chinchao, Huánuco, 1; Alto Quimire, Chanchamayo, Junín, 2); Bolivia (Yungas El Palmar, Cochabamba, 1).

*Accipiter erythronemius erythronemius Kaup. RED-THIGHED ACCIPITER.

Nisus vel *Acc(ipiter) erythronemius* (G. R. Gray MS.)[2] Kaup, Contr. Orn., **3**, p. 64, 1850—"Bolivia" (type[3] in British Museum examined).

[1] Based on an individual mutant of the Merida bird with unusually pale tibial feathers. Aside from that, the specimen is a normal "*salvini*."

[2] *Accipiter erythronemia* G. R. Gray (List Spec. Brit. Mus., **1**, Accipitres, p. 70, 1848) and *Accipiter erythronemus* "Gray" Kaup (Isis, 1847, col. 954) are nomina nuda.

[3] The type is of uncertain origin. It was entered by Gray (1848, p. 70) as "spec. a, Chile? male—Bridges," while Sharpe (Cat. Bds. Brit. Mus., **1**, p. 148) lists it as "spec. a. male ad. st. Brazil(?), Purchased," and in a footnote at bottom

Falco nisus (not of Linnaeus) Wied, Beitr. Naturg. Bras., **3**, (1), p. 111, 1830—Camamu, Bahia.

Nisus striatus (not *Accipiter striatus* Vieillot) Burmeister, Syst. Uebers. Th. Bras., **2**, (1), p. 71, 1856—Lagoa Santa, Minas Geraes, and Nova Friburgo, Rio de Janeiro, Brazil; White, Proc. Zool. Soc. Lond., 1883, p. 41—Cosquin, Cordoba.

Accipiter erythrocnemis Sclater, Proc. Zool. Soc. Lond., 1866, p. 303—part, Brazil; Sclater and Salvin, Exot. Orn., p. 33, pl. 17, 1867—Brazil (Bahia, Lagoa Santa, Nova Friburgo); Berlepsch, Journ. Orn., **21**, p. 286, 1873—Blumenau, Santa Catharina; Lee, Ibis, 1873, p. 135—banks of the Rio Gato (northwest of Gualeguaychu), Entre Rios; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 147, 1874—Brazil and Bolivia; Berlepsch and Ihering, Zeits. Ges. Orn., **2**, p. 170, 1885—Taquara and Arroio Grande, Rio Grande do Sul; Salvadori, Boll. Mus. Zool. Torino, **12**, No. 292, p. 30, 1897—Bolivia (Caiza) and Salta (Tala); Ihering, Ann. Est. Rio Grande do Sul, **16**, p. 139, 1899—Munda Novo and Linha Piraja, Rio Grande do Sul; idem, Rev. Mus. Paul., **3**, p. 350, 1899—Cachoeira, São Paulo; idem, l.c., **4**, p. 162, 1900—Nova Friburgo, Rio de Janeiro; Lillo, Anal. Mus. Nac. Buenos Aires, **8**, p. 203, 1902—Rio Sali, Tucumán; idem, Rev. Letr. Cienc. Soc., **3**, (13), p. 62, 1905—Rio Sali; Hartert and Venturi, Nov. Zool., **16**, p. 238, 1909—Tucumán (Tapia, Rio Sali) and Salta (Valle del Lerma); Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, pp. 242, 414, 1910 (range in Argentina); idem, Bol. Soc. Physis, **1**, p. 300, 1914 (range in Argentina); Bertoni, Faun. Parag., p. 42, 1914—Paraguay; Swann, Syn. List Accip., p. 35, 1919—Brazil to Bolivia; Ménégaux, Rev. Franc. d'Orn., 1925, p. 279—Santiago del Estero (Icano, La Palisa), Parana (Fazenda Concordia); Sztolcman, Ann. Zool. Mus. Pol. Hist. Nat., **5**, p. 122, 1926.

Nisus erythrocnemius Cabanis, Journ. Orn., **22**, p. 228, 1874—Rio de Janeiro (Cantagallo); Ihering, Cat. Faun. Braz., **1**, p. 88, 1907—Cachoeira and Campo de Jordao, São Paulo; Chrostowski, Compt. Rend. Soc. Sci. Varsovie, **5**, pp. 468, 494, 1913—Vera Guarany, Parana.

Nisus erythrocnemis Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, p. 118, 1876 (monog.).

Accipiter ventralis (not of Sclater) Baer, Ornis, **12**, p. 229, 1904—Tapia, Tucumán (spec. examined); Lillo, Rev. Letr. Cienc. Soc., **3**, No. 13, p. 62, 1905 (ex Baer).

Accipiter erythronemius Swann, Syn. Accip., p. 57, 1921—Brazil to Bolivia and Argentina; Hellmayr, Nov. Zool., **28**, p. 181, 1921 (range); Giacomelli, El Hornero, **3**, p. 77, 1923—Saladillo, La Rioja; Stresemann, Journ. Orn., **72**, p. 43, 1924 (range); Wetmore, Bull. U. S. Nat. Mus., **133**, p. 115, 1926—Rio Negro, Uruguay; Pereyra, El Hornero, **6**, p. 438, 1937—Partido de Loberia, Estacion Nutrias del F. C. S., Buenos Aires.

of page states "said to have been from Jamaica, collected by Gosse, but the register probably erroneous." Owing to the loss of the original Register number, its history cannot be traced back to the source, though it should be mentioned that no hawk is inscribed on the books among the birds secured by Thomas Bridges in Bolivia (46.9.9.1–271). The specimen agrees perfectly with Kaup's description and the figure of the adult in "Exotic Ornithology, pl. 17."

Accipiter erythronemius erythronemius Swann, Monog. Bds. Prey, **1**, p. 315, 1926 (monog.); Holt, Bull. Amer. Mus. N. H., **57**, p. 203, 1928—Rio de Janeiro (Morro dos Carneiros; Serra Itatiaya); Peters, Bds. World, **1**, p. 222, 1931 (range); Laubmann, Verh. Orn. Ges. Bay., **20**, p. 289, 1934—Estancia La Geraldina, Santa Fe; Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 407, 1936—Salta (Puerto Diaz, Oran) and Tucumán (Rio Sali); Pinto, Rev. Mus. Paul., **22**, p. 68, 1937—Bahia (Bomfim), São Paulo (Cachoeira; Campos do Jordao; Serra da Cantareira), Parana (Castro), and Matto Grosso (Campo Grande).

Accipiter erythrocnemius Laubmann, Wiss. Erg. Deuts. Gran Chaco Exp., Vogel, p. 101, 1930—Villa Montes, Tarija, Bolivia.

Range.—Southern half of Brazil, from Bahia (Villa Nova da Reinha, Lamarao, Camamu, Caravellas) south to Rio Grande do Sul, west to Matto Grosso (Campo Grande); eastern Bolivia (Depts. of Santa Cruz and Tarija); Paraguayan Chaco; Uruguay (Rio Negro); and northern Argentina, from the Bolivian boundary south to Córdoba (Cosquin), Santa Fe (Est. La Geraldina), and Entre Rios (Rio Gato, Gualeguaychu); occasional even in Buenos Aires (one record from Partido de Loberia, F.C.S.).[1]

Field Museum Collection.—10: Brazil (Fazenda Morungaba, Parana, 1); Paraguay, Chaco (180–265 km. west of Puerto Casado, 2); Argentina (Concepción, Tucumán, 6; El Carrizal, Sierra de Córdoba, 1).

Genus HETEROSPIZIAS Sharpe

Heterospizias Sharpe, Cat. Bds. Brit. Mus., **1**, pp. 158, 160, 1874—type, by monotypy, *Falco meridionalis* Latham.

*Heterospizias meridionalis (Latham). SAVANNA HAWK.

Falco meridionalis Latham,[2] Ind. Orn., **1**, p. 36, 1790—based on "Rufous-headed Falcon" Latham, Gen. Syn. Bds., Suppl., p. 33, Cayenne.

Circus rufulus Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **4**, p. 466, 1816—based on "Gavilán de Estero acanelado" Azara, No. 11, Paraguay (not farther south than 29° S. Lat.).

Falco rutilans Temminck, Nouv. Rec. Pl. Col., livr. 5, pl. 25, Sept., 1820—Brazil and Guiana (type in Paris Museum); Lichtenstein, Verz. Doubl.

[1] Ten specimens from Tucumán and three from Bolivia do not seem to differ appreciably from Brazilian skins.

Additional material examined.—Bolivia: Santa Cruz, 1; Villa Montes, Tarija, 2.—Argentina: Tapia, Tucumán, 2; Rio Sali, Tucumán, 2.—Brazil: Bahia, 1; Caravellas, Bahia, 3; Lamarao, Bahia, 1; Rio de Janeiro, 1; Victoria, São Paulo, 1; Roca Nova, Serra do Mar, Parana, 2; Taquara, Rio Grande do Sul, 1; unspecified, 2.

[2] Latham's description is none too good, as has been remarked by various authors.

Berliner Mus., p. 60, 1823—Brazil; Wied, Beitr. Naturg. Bras., **3**, (1), p. 218, 1830—Rio Parahyba (São Bento, Rio Barganza, Lagõa Feia) and Bahia, Brazil.

Aquila buson "Latham" Spix, Av. Spec. Nov. Bras., **1**, p. 6, 1824—"ad flumen Amazonum," Brazil (type lost; cf. Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **22**, No. 3, p. 568, 1906).

Buteo rutilans d'Orbigny, Voy. Amér. Mérid., Ois., p. 104, 1836; Lafresnaye and d'Orbigny, Syn. Av., **1**, in Mag. Zool., **7**, cl. 2, p. 6, 1837—Corrientes, Buenos Aires, and Bolivia (Chiquitos, Moxos).

Hypomorphnus rutilans Tschudi, Arch. Naturg., **10**, (1), p. 264, 1844—Peru; idem, Unters. Faun. Peru., Orn., p. 84, 1846—"wood-and-ceja" region of Peru; Cabanis, in Schomburgk, Reisen Brit. Guiana, **3**, "1848," p. 740, 1849—savannas of British Guiana.

Asturina rutilans Burmeister, Syst. Uebers. Th. Bras., **2**, p. 80, 1855—Bahia; idem, Journ. Orn., **8**, p. 242, 1860—Tucumán; idem, Reise La Plata St., **2**, p. 436, 1861—Tucumán; Doering, Period. Zool. Arg., **1**, p. 247, 1874—Rio Guayquiraro, Corrientes; Burmeister, Anal. Mus. Nac. Buenos Aires, **3**, p. 316, 1889—Rio Chico, Chubut.

Buteogallus meridionalis Sclater, Proc. Zool. Soc. Lond., **28**, p. 288, 1860—Babahoyo, Ecuador.

Buteo meridionalis Schlegel, Mus. Pays-Bas, Buteones, p. 17, 1862—Surinam and Brazil.

Urubitinga meridionalis Pelzeln, Verh. Zool. Bot. Ges. Wien, **12**, pp. 138, 180, 1862—Bogotá and Brazil (Sapitiba, Ypanemá) (soft parts); Sclater and Salvin, Proc. Zool. Soc. Lond., 1867, p. 589—Mexiana, Brazil; Pelzeln, Orn. Bras., **1**, p. 2, 1868—Rio de Janeiro (Sapitiba), São Paulo (São Paulo, Ypanemá, Jaguaraiba, Itararé, Rio Paraná), Matto Grosso (Cuyabá), and Forte do Rio Branco, Brazil; Sclater and Salvin, Proc. Zool. Soc. Lond., 1869, pp. 252, 634—Venezuela (Plain of Valencia) and Buenos Aires (Conchitas); Reinhardt, Vidensk. Medd. Naturhist. Foren., 1870, p. 71—Lagõa Santa, Minas Geraes; Wyatt, Ibis, 1871, p. 382—Aguachica, Magdalena, Colombia; Lee, Ibis, 1873, p. 136—Rio Gato, near Gualeguaychú, Entre Ríos; Taczanowski, Proc. Zool. Soc. Lond., 1879, p. 241—Guajango, Peru; Salvin and Godman, Ibis, 1879, p. 206—Santa Marta, Colombia; Salvin, Ibis, 1880, p. 362—Salta, Argentina.

Heterospizias meridionalis Sharpe, Cat. Bds. Brit. Mus., **1**, p. 160, 1874 (monog.); Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, No. 2, p. 136, 1876—New Granada, Pará, and Corrientes (monog.); Taczanowski, Orn. Pér., **3**, p. 110, 1884—Peru (Lambedero, Guajango); Barrows, Auk, **1**, p. 109, 1884—Concepción del Uruguay, Entre Ríos; Salvin, Ibis, 1886, p. 74—British Guiana; Sclater and Hudson, Arg. Orn., **2**, p. 63, 1889—Argentina (habits); Frenzel, Journ. Orn., **39**, p. 114, 1891—Córdoba; Riker and Chapman, Auk, **8**, p. 161, 1891—Santarém, Brazil; Kerr, Ibis, 1892, p. 143—lower Pilcomayo; Allen, Bull. Amer. Mus. N. H., **5**, p. 145, 1893—Chapada, Matto Grosso (plumages); Salvadori, Boll. Mus. Zool. Torino, **10**, No. 208, p. 20, 1895—Carayão and Puerto Pagani, Paraguay; idem, l.c., **12**, No. 292, p. 29, 1897—Caiza, Bolivia, and Tala, Salta; Ihering, Ann. Est. Rio Grande do Sul, **16**, p. 139, 1899—Pedras Brancas, Rio Grande do

Sul; idem, Rev. Mus. Paul., **3**, p. 351, 1899—São Paulo; idem, l.c., **4**, p. 162, 1900—Cantagallo, Rio de Janeiro; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 87, 1900—Santa Fé, Veraguas; Salvadori and Festa, Boll. Mus. Zool. Torino, **15**, No. 368, p. 29, 1900—Vinces, Ecuador; Salvadori, l.c., **15**, No. 378, p. 13, 1900—Urucúm, Matto Grosso; Lillo, Anal. Mus. Nac. Buenos Aires, **8**, p. 203, 1902—Rio Salí and Rio Tala, Tucumán; Berlepsch and Hartert, Nov. Zool., **9**, p. 113, 1902—Altagracia, Caicara, and Quiribana de Caicara, Orinoco, Venezuela; Lönnberg, Ibis, 1903, p. 465—Tatarenda, Tarija, Bolivia; Hagmann, Zool. Jahrb. (Syst.), **26**, p. 20, 1907—Mexiana Island, Brazil (habits); Ihering, Cat. Faun. Braz., **1**, p. 88, 1907—Ypiranga, São Paulo, and Fazenda da Faya, Matto Grosso; Berlepsch, Nov. Zool., **15**, p. 292, 1908—Cayenne; Beebe, Zoologica (N.Y.), **1**, p. 80, 1909—Guanoco, Orinoco Delta; Hartert and Venturi, Nov. Zool., **16**, p. 238, 1909—Mocoví, Chaco, and Los Vasquez, Tucumán; Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 243, 1910 (range in Argentina); Chubb, Ibis, 1910, p. 72—Sapucay, Paraguay; Reiser, Denks. Math.-Naturw. Kl. Akad. Wiss. Wien, **76**, p. 90, 1910—Bahia (near Sambaiba, Rio São Francisco) and Piauhy (Lagõa do Saco and Santo Antonio de Gilbúes); Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **26**, (2), p. 121, 1912—Mexiana; Snethlage, Bol. Mus. Goeldi, **8**, p. 29, 1914—Rio Xingú (Victoria), Marajó (Pacoval, Rio Arary, São Natal), and Mexiana, Brazil; Bertoni, Faun. Parag., p. 42, 1914—Alto Paraná, Paraguay; Lillo, Rev. Letr. Cienc. Soc., **3**, No. 13, p. 62, 1915—Rio Salí and Rio Tala, Tucumán; Scott and Sharpe, Rep. Princet. Univ. Exped. Patag., **2**, Orn., p. 610, 1915—Rio Chico, Chubut (ex Burmeister); Cherrie, Sci. Bull., Mus. Brookl. Inst., **2**, p. 343, 1916—savanna region of the Orinoco; Chubb, Bds. Brit. Guiana, **1**, p. 229, 1916—upper Takutu Mountains; Bangs and Noble, Auk, **35**, p. 444, 1918—Perico, Peru; Swann, Syn. List Accip., p. 40, 1919 (range); Arribálzaga, El Hornero, **2**, p. 92, 1920—Chaco; Marelli, Mem. Min. Obr. Publ. for 1922–23, p. 629, 1924—Prov. Buenos Aires; Ménégaux, Rev. Franç. d'Orn., 1925, p. 279—Laguna Mamaita, near Icaño, Santiago del Estero; Young, Ibis, 1929, p. 7—coastland of British Guiana (habits); Berlioz, Bull. Mus. Hist. Nat. Paris, (2), **4**, p. 230, 1932—Isle Silva and La Palma, Rio Babahoyo, Ecuador; Griscom, Bull. Mus. Comp. Zool., **72**, p. 313, 1932—Permé, Darien, Panama; Dugand, Rev. Acad. Colomb. Cienc., Bogotá, **4**, p. 398, pl. 6, fig. 34, 1941—Colombia.

Heterospizias meridionalis australis Swann, Auk, **38**, No. 3, p. 359, Oct. 5, 1921—Laguna de "Malima" [=Malvinas], Tucumán, Argentina (type in coll. of H. K. Swann, now in Museum of Comparative Zoology, Cambridge, Mass.); idem, Syn. Accip., p. 67, 1921—Argentina; idem, Monog. Bds. Prey, **1**, p. 344, 1926—Argentina (monog.); Wetmore, Bull. U. S. Nat. Mus., **133**, p. 114, 1926—Riacho Pilaga (Formosa), Buenos Aires, and Corrientes (crit.); Smyth, El Hornero, **4**, p. 14, 1927—Manchalá, Tucumán (egg descr.); Laubmann, Wiss. Erg. Deuts. Gran Chaco Exp., Vögel, p. 102, 1930—Mission Tacaaglé, Formosa; Peters, Bds. World, **1**, p. 226, 1931 (range); Laubmann, Verh. Orn. Ges. Bay., **20**, p. 291, 1934—Est. La Geraldina, Santa Fé (crit.).

Heterospizias meridionalis meridionalis Swann, Syn. Accip., p. 66, 1921—Panama to Paraguay; Todd and Carriker, Ann. Carnegie Mus., **14**,

p. 151, 1922—Mamatoco, Bonda, and Fundación, Colombia; Wetmore, Bull. U. S. Nat. Mus., **133**, p. 113, 1926—west of Puerto Pinasco, Paraguay; Swann, Monog. Bds. Prey, **1**, p. 342, pl. [17], 1926 (monog.); Chapman, Bull. Amer. Mus. N. H., **55**, p. 225, 1926—Puná Island, Alamor, and Guainché, Ecuador; Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **12**, p. 459, 1929—Piauhy; Naumburg, Bull. Amer. Mus. N. H., **60**, p. 106, 1930—Matto Grosso; Laubmann, Wiss. Erg. Deuts. Gran Chaco Exp., Vögel, p. 101, 1930—La Crecencia, Santa Cruz, and Villa Montes, Tarija, Bolivia (crit.); Peters, Bds. World, **1**, p. 226, 1931 (range); Darlington, Bull. Mus. Comp. Zool., **71**, p. 366, 1931—Rio Frio, Magdalena, Colombia; Belcher and Smooker, Ibis, 1934, p. 590—Trinidad (nest and eggs); Roberts, Trop. Agric., **11**, p. 89, 1934—Piarco Savannah, Trinidad; Stone and Roberts, Proc. Acad. Nat. Sci. Phila., **86**, p. 371, 1934—Descalvados, Matto Grosso; Griscom, Bull. Mus. Comp. Zool., **78**, p. 298, 1935—Pacific slope of Chiriquí and Veraguas; Pinto, Rev. Mus. Paul., **20**, p. 51, 1936—Fazenda Formiga, Rio das Almas, Goyáz; Gyldenstolpe, K. Svensk. Vetensk. Akad. Handl., (3), **23**, p. 50, 1945—Bresta, El Beni, Bolivia (disc.).

Heterospizias meridionalis rufulus Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 409, 1936—Salta (Rosario), Tucumán (Barránca Colorado), and Napalpí (Chaco) (crit.).

Range.—Western Panama (Pacific slope of Chiriquí and Veraguas)[1] south to western Ecuador, and through Colombia and Venezuela to the Island of Trinidad and southward through the Guianas, eastern Peru, eastern Bolivia, and Brazil to Rio Grande do Sul, Paraguay, and northern Argentina as far south as Tucumán, Córdoba, Entre Ríos, and Buenos Aires (one record, by C. Burmeister, from the Rio Chico, Chubut).[2]

[1] The records from Mexico by Swainson (Phil. Mag., n.s., **1**, p. 366, 1827, s.n. *Circus rutilans*) and from Costa Rica by Zeledón (Anal. Mus. Nac. Costa Rica, **1**, p. 126, 1887) have never been confirmed.

[2] Subdivision of the Savanna Hawk appears to be impracticable. The color differences given by Swann do not exist at all, paler and darker birds being found alike in the northern and southern parts of the range. All that can be said is that there is a gradual increase in size, as one advances in a southerly direction, but the variation is rather erratic, and unless a much larger series of properly sexed specimens than are at present available in any museum supply more satisfactory evidence, we do not see any practical advantage in maintaining a southern form (*rufulus* or *australis*). An adult female from Maturin, Venezuela, has a wing of 428 mm., and one from Marajó, northern Brazil, one of 425 mm., while adult females from Tucumán have wings from 425 to 450 mm. Steullet and Deautier give the wing of an adult male from Napalpí, Chaco, as 407 mm., and Laubmann that of one from Zanja Morotí, Apa hills, northern Paraguay, as 400 mm., thus agreeing with others from the north. Four adult males from Bolivia all measure under 400 mm., while three supposed adult females vary from 403 to 432 mm. Two adult females from São Paulo (wings, 450 mm.) are among the largest we have seen. Wetmore, however, records 412 mm. for a female from west of Puerto Pinasco, Paraguay, which should pertain to *australis*, but is smaller than those from Maturin, Venezuela, and Marajó, northern Brazil.

Twenty-six additional adult birds, including three from Agua Dulce, Panama, were examined.

Field Museum Collection.—67: Panama (unspecified, 1); Colombia (Santander, Valle, 1; Maicao, Guajira, 2; Villavicencio, Meta, 3); Ecuador (Malacatos, Loja, 2; Cerro Cayambe, Oriente, 1); Venezuela (Maracay, Aragua, 2); British Guiana (Georgetown, 1; Buxton, 5); Brazil (Bõa Vista, Rio Branco, 3; Canutama, Rio Purús, 3; Igarape Aniba, Amazonas, 3; Lago do Baptista, Amazonas, 1; Boca Ituqui, Pará, 2; Obidos, Pará, 2; Quixada, Ceará, 1; São Marcello, Bahia, 1; Descalvados Ranch, Matto Grosso, 1; Chapadà, Matto Grosso, 2; Vaccaria, Matto Grosso, 1); Bolivia (Cercado, Santa Cruz, 4; Nueva Moka, 2; San Carlos, 3; Buena Vista, 4); Paraguay (83 km. west of Puerto Casado, 3; Puerto Casado, 3; Horqueta, 3); Argentina (Concepción, Tucumán, 7).

Subfamily BUTEONINAE. Buzzards and Eagles

Genus **BUTEO** Lacépède

Buteo Lacépède, Tabl. Meth. Ois., p. 4, 1799—type, by tautonymy, "*Buteo*"= *Falco buteo* Linnaeus.

Asturina Vieillot,[1] Anal. Nouv. Orn. Elem., pp. 24, 68, April, 1816—type by orig. desig., "*Asturia*" (sic) *cinerea* Vieillot=*Falco nitidus* Latham.

Triorchis Kaup, Skizz. Entw. Gesch. Europ. Thierw., p. 84, 1829—type, by monotypy (p. 83), *Falco lagopus* Gmelin=*Falco lagopus* Pontoppidan.

Archibuteo Brehm,[2] Handl. Naturg. Deuts., p. 38, 1831—type, by virtual monotypy, *Archibuteo planiceps* Brehm and *Archibuteo alticep* Brehm, both=*Falco lagopus* Brunnich.

Craxirex Gould, in Darwin, Zool. Beagle, **3**, Birds, Part 6, p. 22, Jan., 1839—type, by monotypy, *Polyborus galapagoensis* Gould.

Rupornis Kaup,[3] Classif. Saug. Vögel, p. 120, 1844—type, by monotypy, *Falco magnirostris* Gmelin.

Geranoaetus Kaup,[4] Classif. Saug. Vögel, p. 122, 1844—type, by monotypy, *Falco aguja* Temminck=*Spizaetus fuscescens* Vieillot.

Tachytriorchis Kaup, Classif. Saug. Vögel, p. 123, 1844—type, by monotypy, *Falco pteroclea* (sic) Temminck=*Buteo albicaudatus*.

Rypornis Sundevall, Ofv. Vetensk. Akad. Handl., **31**, No. 2, p. 25, 1874—substitute for *Rupornis* Kaup.

Dromolestes Sundevall, Ofv. Vetensk. Akad. Handl., **31**, No. 2, p. 27, 1874—substitute for *Craxirex* Gould.

Heteroaetus Kaup, Mus. Senckenb., **3**, p. 261, 1845—new name for *Geranoaetus* Kaup.

[1] Cf. A. J. van Rossem, Bull. Mus. Comp. Zool., **77**, p. 429, 1934.

[2] *Archibuteo* Brehm (Isis, 1828, col. 1269) is a nomen nudum.

[3] Cf. Peters, Bds. World, **1**, p. 228 (notes), 1931.

[4] Cf. Wetmore, Auk, **50**, p. 212, 1933.

Heteraetus Kaup, Arch. Naturg., **16**, (1), p. 39, 1850—type, by monotypy, *Falco aguia* Temminck.

Poeciloptemis Kaup, Isis, 1847, col. 329—type, by subs. desig. (Sharpe, Cat. Bds. Brit. Mus., **1**, p. 164, 1874), *Falco latissimus* Bonaparte=*Sparvius platypterus* Vieillot.

Buteola (Du Bus MS.) Bonaparte, Compt. Rend. Acad. Sci. Paris, **41**, No. 17, p. 651 (for Oct. 22), 1855—type, by orig. desig., *Buteo brachyurus* Vieillot.

Potamolegus Bertoni, Anal. Cient. Parag., **1**, No. 1, p. 158, Jan., 1901—type, by subs. desig. (Peters, Bds. World, **1**, p. 228, 1931), *Potamolegus superciliaris magniplumis* Bertoni.

Percnohierax Ridgway, Smiths. Misc. Coll., **72**, No. 4, p. 2, Dec. 6, 1920—type, by orig. desig., *Falco leucorrhous* Quoy and Gaimard.

Coryornis Ridgway, Auk, **42**, p. 585, Oct. 6, 1925—type, by orig. desig., *Rupornis Ridgwayi* Cory.

*Buteo polyosoma polyosoma (Quoy and Gaimard). RED-BACKED BUZZARD.

Falco polyosoma Quoy and Gaimard, in Freycinet, Voyage "Uranie et Physicienne," Zool., livr. 3, p. 92, pl. 14, Aug., 1824—Falkland Islands (descr. of melanistic variety; type in Paris Museum).

Haliaetus erythronotus King, Zool. Journ., **3**, No. 11, p. 424, Sept.-Dec., 1827—Straits of Magellan (descr. of normal adult female; location of type unknown).

Buteo poliosoma Lesson, Voy. Coquille, Zool., **1**, (2), livr. 14, p. 616, 1830—Falkland Islands; Sclater, Proc. Zool. Soc. Lond., **28**, p. 384 (footnote), 1860—Falkland Islands; idem, Ibis, 1860, p. 25, pl. 7, fig. 3 (egg)—Falkland Islands (egg descr.); Abbott, Ibis, 1861, p. 151—Falkland Islands (nest and eggs); Sclater, Proc. Zool. Soc. Lond., 1861, p. 45—Falkland Islands; Philippi, Anal. Univ. Chile, **31**, p. 243, 1868—Santiago, Chile; Reed, l.c., **93**, p. 205, 1896—Chile; Scott and Sharpe, Rep. Princet. Univ. Exped. Patag., Orn., **2**, (1), p. 631, 1915—Patagonia; Bennett, Ibis, 1926, p. 330—Falkland Islands; Marelli, El Hornero, **5**, p. 194, 1933—Fortin Chaco and Bahia Blanca, Buenos Aires.

Aquila braccata Meyen, Nov. Act. Acad. Caes. Leop.-Carol. Nat. Cur., **16**, Suppl. 1, p. 65, pl. 18, 1834—"Desierta de Copiapo," Atacama, Chile (descr. of normal adult male; type in Berlin Museum).

Buteo tricolor d'Orbigny, Voy. Amér. Mérid., Ois., p. 106, pl. 3, 1836—Patagonia (Rio Negro), Chile (Santiago) and Bolivia (La Paz) (type from Rio Negro, Patagonia, in Paris Museum examined); Lafresnaye and d'Orbigny, Syn. Av., **1**, in Mag. Zool., **7**, cl. 2, p. 6, 1837—Patagonia and Bolivia (descr. of both sexes in normal phase); Tschudi, Unters. Faun. Peru., Orn., p. 90, 1846—Peru (descr. male and female); Burmeister, Journ. Orn., **8**, p. 242, 1860—western and northern Argentina; idem, Reise La Plata St., **2**, p. 436, 1861—Mendoza and Tucumán; Doering, Period. Zool. Arg., **1**, p. 247, 1874—Barrancas, Rio Guayquiraro, Corrientes; Burmeister, Anal. Mus. Nac. Buenos Aires, **3**, p. 315, 1889—

Rio Chico, Chubut; Hellmayr, Nov. Zool., **28**, p. 186, 1921—Patagonia (crit. note on type).

Buteo unicolor d'Orbigny, Voy. Amér. Mérid., Ois., p. 109, 1836—near Palca, Ayupaya, Bolivia (descr. of melanistic young; type in Paris Museum examined); Lafresnaye and d'Orbigny, Syn. Av., **1**, in Mag. Zool., **7**, cl. 2, p. 7, 1837—Ayupaya, Bolivia; Gurney, Ibis, 1876, pp. 69, 242 (crit.); Hellmayr, Nov. Zool., **28**, p. 186, 1921 (crit. on type).

Buteo varius Gould, Proc. Zool. Soc. Lond., **5**, p. 10, Oct. 3, 1837—"Santa Cruz," (errore), Patagonia (descr. of normal juvenile plumage; type now in Norwich Museum (cf. Gurney, Ibis, 1876, p. 69); Gould, in Darwin, Zool. Beagle, **3**, Birds, p. 26, 1839—Straits of Magellan and Port San Julian in southern Patagonia; Cassin, U. S. Expl. Exp., **8**, pp. 92, 429, pl. 3, fig. 1, 1858—Rio Negro and Orange Bay (Hoste Island); Gould, Proc. Zool. Soc. Lond., **27**, p. 94, 1859—Falkland Islands; Sclater, l.c., **28**, p. 384, 1860—Falkland Islands; Gurney, List Diurn. Bds. Prey, p. 69, (note 5), 1884.

Buteo erythronotus Darwin, Zool. Beagle, **3**, Birds, p. 26, 1839—Chiloe, Chile and Falkland Islands; Frazer, Proc. Zool. Soc. Lond., **11**, p. 109, 1843—Chile; Des Murs, in Gay, Hist. Fís. Pol. Chile, Zool., **1**, p. 215, 1847—Chile (Concepción); Bibra, Denks. Math. Naturw. Kl. Akad. Wiss. Wien, **5**, (2), p. 128, 1853—Cordillera (of Santiago), Chile; Boeck, Naumannia, 1855, p. 497—Valdivia, Chile; Cassin, U. S. Astr. Exp., **2**, p. 175, 1855—Chile; Jardine, Edinb. New Phil. Journ., n. s., **2**, p. 117, 1855—elevated tableland of the eastern Cordillera, Ecuador (crit.); Gould, Proc. Zool. Soc. Lond., **27**, p. 93, 1859—Falkland Islands (egg); Sclater, l.c., **28**, p. 384, 1860—Falkland Islands; Germain, Proc. Bost. Soc. N. H., **7**, p. 309, 1860—Santiago, Chile (nesting habits); Abbott, Ibis, 1861, p. 151—Falkland Islands; Sclater, Proc. Zool. Soc. Lond., 1861, p. 45—Falkland Islands; Pelzeln, Verh. Zool. Bot. Ges. Wien, **12**, p. 143, 1862—Chile (crit.); Sclater, Proc. Zool. Soc. Lond., 1867, pp. 329, 338—Chile; Sclater and Salvin, l.c., 1867, p. 988—Arequipa, Peru; Philippi, Anal. Univ. Chile, **31**, p. 243, 1868—Chile; Sclater and Salvin, Ibis, 1868, p. 188—Sandy Point, Magellan Straits; iidem, l.c., 1869, p. 284—Fox Bay, West Falkland Island; iidem, Proc. Zool. Soc. Lond., 1869, p. 155—Tinta, Peru; Durnford, Ibis, 1870, p. 397—Chubut Valley; Sclater, Proc. Zool. Soc. Lond., 1872, p. 549—Rio Negro, Patagonia; Sclater and Salvin, l.c., 1874, p. 678—Paucartambo, Peru; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 172, 1874—part, spec. a–m, s, t, Falklands and Magallania; Allen, Bull. Mus. Comp. Zool., **3**, p. 355, 1876—Moho, Lake Titicaca, Peru; Durnford, Ibis, 1877, p. 38—Chubut Valley and Punta Ninfas, Chubut; Gibson, l.c., 1879, p. 411—Cape San Antonio, Buenos Aires; Salvin, l.c., 1880, p. 362—Salta; Doering, in Roca, Inf. Ofic. Exp. Rio Negro, Zool., p. 50, 1881—between Azul and Carhue, Buenos Aires and near the Rio Colorado; Salvin, Proc. Zool. Soc. Lond., 1883, p. 426—Coquimbo, Chile; Barrows, Auk, **1**, p. 109, 1884—between Carhue and Azul, Buenos Aires; Taczanowski, Orn. Per., **3**, p. 115, 1884—Peru (Pacasmayo, Guadalupe, Tumbez, etc.); Philippi, Ornis, **4**, p. 158, 1888—Cebollar, Antofagasta, Chile; Withington, Ibis, 1888, p. 469—Lomas de Zamora, Buenos Aires; Sclater and Hudson, Arg. Orn., **2**, p. 62, 1889—Argentina (habits);

Sclater, Proc. Zool. Soc. Lond., 1891, p. 135—part, Canchosa, Tarapacá, Chile; Frenzel, Journ. Orn., **39**, p. 114, 1891—Sierra Arenas, Straits of Magellan; Lataste, Act. Soc. Sci. Chile, **5**, p. lx, 1895—Llohue (Itata), Maule; Koslowsky, Rev. Mus. La Plata, **6**, p. 285, 1895—Chilecito, La Rioja; Holland, Ibis, 1895, p. 216—Santa Elena, Entre Ríos, Salta (habits); Reed, Anal. Univ. Chile, **93**, p. 205, 1896—cordilleras of central provinces of Chile; Salvadori, Boll. Mus. Zool. Torino, **12**, No. 292, p. 28, 1897—Tala; Lane, Ibis, 1897, p. 179—part, Cancosa, Tarapacá, Chile; Schalow, Zool. Jahrb., Suppl. 4, p. 695, 1898—Pampa Tamarugal, Iquique, Tarapacá, Chile; Salvadori and Festa, Boll. Mus. Zool. Torino, **15**, No. 368, p. 30, 1900—La Concepción (Nota) and Santa Elena, Ecuador; Salvadori, Ann. Mus. Civ. Stor. Nat. Genova, **40**, p. 614, 1900—Rio Pescado, Magellan Straits and Santa Cruz; Albert, Anal. Univ. Chile, **108**, p. 255, 1901—Chile (crit.); idem, Zool. Jahrb., Suppl. 5, p. 648, 1902—Chile (crit.); idem, Ornis, **71**, p. 442, 1902—Chile (crit.); Berlepsch and Stolzmann, Proc. Zool. Soc. Lond., 1902, (2), p. 42—Ingapirca and Maraynioc, Junín, Peru; Lillo, Anal. Mus. Nac. Buenos Aires, **8**, p. 204, 1902—Rio Sali, Tucumán; Philippi, Anal. Mus. Nac. Chile, **15**, p. 13, 1902—Chile (crit.); Lönnberg, Ibis, 1903, p. 447—Moreno, Puna of Jujuy; Lillo, Rev. Letr. Cienc. Soc., **3**, No. 13, p. 62, 1905—Rio Sali, Tucumán; Berlepsch and Stolzmann, Ornis, **13**, pp. 124, 130, 1906—Huaynapata and Puno, southeastern Peru; Crawshay, Bds. Tierra del Fuego, p. 12, 1907—San Sebastian, Sara and Rio McClelland; Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 244, 1910 (range in Argentina); Scott and Sharpe, Rep. Univ. Princet. Exped. Patag., **2**, Orn., p. 634, 1915—Rio Chico, Arroyo Eke, Coy Inlet and Punta Arenas; Reed, Av. Prov. Mendoza, p. 21, 1916—plains of Mendoza; Sanzin, El Hornero, **1**, p. 149, 1918—Tunuyan, Mendoza; Chubb, Ibis, 1919, p. 281—part, Eten and Sullana, Peru; Gibson, Ibis, 1919, p. 508—Cape San Antonio, Buenos Aires; Tremoleras, El Hornero, **2**, p. 17, 1920—Flores and San José, Uruguay; Chapman, Bull. U. S. Nat. Mus., **117**, p. 57, 1921—Peru to Tierra del Fuego (crit.; meas.); Barros, Rev. Chil. Hist. Nat., **25**, p. 176, 1921—Rio Blanco, Aconcagua, Chile; Wace, El Hornero, **2**, p. 203, 1921—Falkland Islands; Daguerre, l.c., p. 266, 1922—Rosas, Buenos Aires; Serié and Smyth, **77**, 1923—La Rioja; Marelli, Mem. Min. Obr. Publ. for 1922–23, p. 630, 1924—Prov. Buenos Aires (Aziel, Lomas de Zamora); Housse, Rev. Chil. Hist. Nat., **29**, pp. 141, 225, 1925—San Bernardo, Santiago and Isla La Mocha, Arauco, Chile; Ménégaux, Rev. Franc. d'Orn., 1925, p. 280—near Icano, Bracho and Laguna de Canitas, Santiago del Estero; Bennett, Ibis, 1926, p. 330—Falkland Islands; Wilson, El Hornero, **3**, p. 356, 1926—Venado Tuerto, Santa Fe; Barros, Rev. Chil. Hist. Nat., **30**, p. 142, 1926—Nilahue, Curico, Chile; Jaffuel and Pirion, l.c., **31**, p. 103, 1927—Marga-Marga Valley, Valparaiso, Chile; Bullock, l.c., **33**, pp. 126, 196, 1929—Nahuelbuta and Angol, Malleco, Chile; Housse, l.c., **33**, p. 243, 1929—Chile (crit.); (?)Budin, El Hornero, p. 406, 1931—Maimara, Jujuy; Castellanos, l.c., **5**, p. 406, 1932—Valle de los Reartes, Cordoba and Tafi Viejo, Tucumán.

Hypomorphnus leucurus (not *Spizaetus leucurus* Vieillot) Lafresnaye, Rev. Mag. Zool., (2), **1**, p. 388, 1849 (in part).

Buteo infulatus Kaup, Contr. Orn., 1850, p. 76—"Galapagos"=Port Desire, Patagonia (descr. of young; type in the British Museum examined; cf. Swarth and Kinnear, Occ. Pap. Calif. Acad. Sci., **18**, p. 50, 1931).

Buteo leucops (G. R. Gray MS.) Kaup, Arch. Naturg., **16**, (1), p. 40, 1850—new name for *Buteo infulatus* Kaup; Gurney, List Diurn. Bds. Prey, p. 143, 1884 (crit.).

Buteo ventralis (not of Gould) Cassin, U. S. Expl. Exp., **2**, p. 94, pl. 3, fig. 2, 1858—Orange Bay, Tierra del Fuego.

Buteo braccatus Pelzeln, Verh. Zool. Bot. Ges. Wien, **12**, p. 142, 1862—Chile; idem, Reise Novara, Zool., **1**, Vogel, pp. 6, 16, 1865—Chile.

Buteo polyosoma Schlegel, Mus. Pays-Bas, Buteones, p. 12, 1862—Falkland Islands and Chile (crit.); Wetmore, Bull. U. S. Nat. Mus., **133**, p. 110, 1926—General Roca, Pampa; idem, Univ. Calif. Pub. Zool., **24**, p. 422, 1926—Arroyo Salado, Rio Negro, and Lago Mosquitos, Cholila, Chubut.

Buteo albicaudatus (not of Vieillot) Sclater and Salvin, Proc. Zool. Soc. Lond., 1873, p. 186—Cosnipata, Peru; Koslowsky, Rev. Mus. La Plata, **6**, p. 285, 1895—Chilecito, La Rioja.

Buteo poliosomus Sharpe, Cat. Bds. Brit. Mus., **1**, p. 171, 1874—Port Famine, Falkland Islands and Chile (monog.); Gurney, Ibis, 1876, p. 69 (crit.); Oustalet, Miss. Sci. Cap Horn, p. B.22, 1891—Orange Bay and Ushuaia, Beagle Channel (crit.); Arribalzaga, Ann. Mus. Nac. Buenos Aires, **8**, p. 160, 1902—Lago General Paz, Chubut; Dabbene, l.c., **18**, p. 244, 1910 (range in Argentina); Brooks, Bull. Mus. Comp. Zool., **61**, p. 157, 1917—Falkland Islands; Swann, Syn. List Accip., p. 51, 1919 (chars.; range); Wace, El Hornero, **2**, p. 203, 1921—Falkland Islands; Swann, Syn. Accip., p. 84, 1921 (chars.; range).

Buteo (Craxierex) poliosomus Ridgway, Proc. Acad. Nat. Sci. Phila., 1875, p. 94 (monog.).

Buteo (Craxierex) erythronotus Ridgway, Proc. Acad. Nat. Sci. Phila., 1875, p. 96 (monog.).

Buteo melanostethus(os) Philippi, Anal. Univ. Chile, **103**, pp. 663, 665, 1899—Chile (type in National Museum, Santiago de Chile); idem, Arch. Naturg., **65**, (1), p. 167, 1899—Prov. Santiago, Chile; idem, Anal. Mus. Nac. Chile, **15**, p. 5, pl. 2, 1902—central provinces of Chile (=melanistic variety of adult female); Philippi B., El Hornero, **8**, p. 180, 1942 (type=female in dark phase with erythrism on abdomen).

Buteo poecilogaster Philippi, Anal. Univ. Chile, **103**, pp. 663, 666, 1899—Chile; idem, Arch. Naturg., **65**, (1), p. 167, 1899—Chile; idem, Anal. Mus. Nac. Chile, **15**, p. 6, pl. 3, 1902—Chile (=juvenile plumage); Housse, Rev. Chil. Hist. Nat., **28**, p. 48, 1924—Isla La Mocha, Arauco;[1] Philippi B., El Hornero, **8**, p. 180, 1942 (type=female immature normal phase).

[1] Several other "new" species of Philippi's are not identifiable with certainty. *Buteo albigula* Philippi (Anal. Univ. Chile, **103**, p. 664, 1899; Arch. Naturg., **65**, (1), p. 170, 1899; Anal. Mus. Nac. Chile, **15**, p. 9, pl. 6, 1902—Valdivia), *Buteo aethiops* Philippi (Anal. Univ. Chile, **103**, pp. 665, 668, 1899; Arch. Naturg., **65**, (1), p. 168, 1899; Anal. Mus. Nac. Chile, **15**, p. 16, pl. 8, 1902—central provinces of Chile), and *Buteo pictus* Philippi (Anal. Univ. Chile, **103**, pp. 665, 668, 1899; Arch. Naturg., **65**, (1), p. 169, 1899; Anal. Mus. Nac. Chile, **12**, p. 17, pl. 9, 1902—

Asturina(?) aethiops Philippi, Anal. Mus. Nac. Chile, **15**, Zool., p. 16, pl. 8, 1902—central provinces of Chile; Philippi B., El Hornero, **8**, p. 181, 1942 (=*Buteo polyosoma polyosoma* Quoy and Gaimard).

Tachytriorchis albicaudatus(?) Goodfellow, Ibis, 1902, p. 221—Pichincha and Corazon, Ecuador; Reed, Av. Prov. Mendoza, p. 21, 1916—Cordillera of Mendoza; Sanzin, El Hornero, **1**, p. 149, 1918—Mendoza; Giacomelli, l.c., **3**, p. 77, 1923—Chilecito, La Rioja (ex Koslowsky).

Buteo hypospodius (not of Gurney) Chapman, Bull. Amer. Mus. N. H., **36**, p. 242, 1917—near Santa Isabel, central Andes, Colombia.

Buteo erythronotus erythronotus Swann, Syn. List Accip., p. 52, 1919 (range); idem, Syn. Accip., p. 85, 1921 (range); Peters, Bull. Mus. Comp. Zool., **65**, p. 305, 1923—Huanuluan, Rio Negro.

Buteo erythronotus peruviensis Swann, Syn. Accip., p. 85, 1922—Eten, Lambayeque, Peru (type in British Museum, examined); Lönnberg and Rendahl, Ark. Zool., **14**, No. 25, p. 36, 1922—Pichincha, Mount Atacazo (south of Anito), Pomasqui, and western Mojanda, Ecuador (crit.).

Buteo polyosoma polyosoma Stresemann, Journ. Orn., **73**, p. 31A, 1925—Rio Negro, Patagonia, to Anito, Ecuador (crit.); Chapman, Bull. Amer. Mus. N. H., **55**, p. 227, 1926—Ecuador (Guapulo, Chimborazo, "Ambato," Corazon) and Colombia (Santa Isabel) (crit.; meas.); Pereyra, El Hornero, **4**, p. 29, 1927—Conhelo, La Pampa; Swann, Monog. Bds. Prey, **1**, p. 409, pls. 21, 22, 1928 (monog.); Peters, Bds. World, **1**, p. 229, 1931 (range); Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **19**, p. 273, 1932—Chile, from Tarapaca to the Straits of Magellan (crit.); Barros, Rev. Chil. Hist. Nat., **38**, p. 139, 1934—Cuesta de la Culebra, Penco, O'Higgins, Chile; Bullock, l.c., **39**, p. 240, 1935—Isla La Mocha, Arauco; Reynolds, Ibis, 1935, p. 75—Freycinet, Wollaston, and Bayly Islands, Cape Horn (crit.); Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 17, 1936—Santa Cruz (Lago Viedma), Chubut (Paso de Indios, Deseado, Colonia, Lago Muster), Neuquen (Nahuel Huapi), Rio Negro, Buenos Aires (La Plata), Mendoza, La Rioja, Salta (Ambrado del Zorro, Valle de Lerma) and Jujuy (San Lorenzo) (crit.); Housse, Rev. Univ. Santiago, **24**, p. 53, 1939—Chile (range and habits); Lehmann, Caldasia, **7**, p. 186, 1943—Quintana, Colombia (disc.).

Buteo polyosoma unicolor (not of d'Orbigny) Stresemann, Journ. Orn., **73**, p. 315, 1925 (crit.).

Buteo polyosoma peruviensis Chapman, Bull. Amer. Mus. N. H., **55**, p. 228, 1926—Punta Santa Elena, Ecuador (crit.); Swann, Monog. Bds. Prey, **1**, p. 412, 1928—part, coast of Peru; Peters, Bds. World, **1**, p. 229, 1931; Lehmann, Rev. Univ. Cauca, **6**, pl., p. 115, 1945—El Tambo, Quindio, Colombia (chars.; plum.).

Valdivia), however, were probably based on juvenile individuals of the present species, or may be referable to *B. swainsoni*.—C.E.H.

Philippi B. (El Hornero, **8**, pp. 180, 181, 182, 1942) states that the type of *B. albigula* (taken in Valdivia) is an immature male of the normal phase of *B. p. polyosoma;* the type of *B. aethiops* (taken in the Central Provinces) an immature female of the dark phase of the same species; and the type of *B. pictus* (taken in Valdivia) an immature female of *B. jamaicensis ventralis* Gould, and that this race has been found nesting at Malleco. All three types are in the National Museum, Santiago, Chile.—B.C.

Buteo borealis ventralis Kuroda, Tori, 8, p. 141, 1933—San Bornonol, Perquenco, Chile (descr. of young).

Range.—Temperate zone of the Andes of Colombia (Santa Isabel, central Andes; El Tambo, Cauca), Ecuador, Peru and Bolivia, south through Chile and Argentina (east to Tucumán, Santiago del Estero and Cordoba) to Tierra del Fuego; in winter spreading to Santa Fe, Entre Rios, Corrientes, and Uruguay; Falkland Islands.[1]

Field Museum Collection.—28: Colombia (El Tambo, Cauca, 4); Ecuador (Tunguilla Valley, 1; Baños, Azuay, 1); Peru (Sullana, Amotape Mountains, 1); Bolivia (Viacha, La Paz, 1; Tiraque, Cochabamba, 1; Cerro Juno, Cochabamba, 3); Chile (Domeyko, Atacama,

[1] It is now an established fact that this buzzard occurs in various mutational, strictly alternative plumages. The normal dress of the adult male is gray above, excepting the upper tail coverts, and white below, with a varying amount of narrow dusky cross-bars posteriorly (described as *Aquila braccata* Meyen), while the female in this stage has an extensive dorsal area, bright tawny (*Haliaetus erythronotus* King). In the melanistic variety the male is dark gray above and below (*Buteo polyosoma* Quoy and Gaimard), while the female has the throat, foreneck, thighs, and under tail coverts deep slate gray in contrast to the rufous breast and abdomen. Young birds also appear sometimes in a nearly uniform dark brown, melanistic mutation (*Buteo unicolor* d'Orbigny), though this type of coloration is much less common than the variegated, striped plumage.

Males in normal plumage are somewhat variable. The majority are, as already stated, uniform gray above; others have touches of rufous here and there; others again are rather profusely spotted with rufous; and a few have the upper back to the same extent as females bright tawny, though this area is streaked with slate gray. These various stages are all represented in two series from Chubut (Valle del Lago Blanco) and central Chile. The few examples from Peru available for comparison happen to be in normal plumage. Melanistic adults of both sexes have been examined from the Falkland Islands, Straits of Magellan, Chubut (Valle del Lago Blanco), and central Chile; melanistic young birds from the Falklands, Chubut and Bolivia. The supposed smaller size of *B. p. peruviensis* of northern Peru proves to be non-existent in the light of the large series, whose wing measurements are appended.

ADULT MALES

Falkland Islands, 370, 390.
Tierra del Fuego, 390, 400.
Straits of Magellan, 380, 390.
Valle del Lago Blanco, Chubut, 370, 380, 380, 390, 390, 390, 395, 395, 400.
Nahuel Huapi, Rio Negro, 365, 370.
Aufama, Tucumán, 370.
Central Chile, 375, 380, 385, 385, 390.
Cancosa, Tarapacá, Chile, 390.
Eten, Peru (*peruviensis*), 370.

ADULT FEMALES

Falkland Islands, 400, 410, 415, 435.
Lago Blanco, Chubut, 410, 415, 415, 420, 420, 420, 425, 430, 430, 440.
Rio Negro, 415.
Nahuel Huapi, Rio Negro, 420.
Buenos Aires, 420, 425, 455(!).
Salta, 430.
Central Chile, 400, 410, 415, 420.
Eten, Peru (*peruviensis*), 415.

1; Batuco, Santiago, 2; Sierra Nahuelbuta, Malleco, 1; Rio Nirehuau, Aysen, 1; Porvenir, Tierra del Fuego, 2); Argentina (Aconquija, Tucumán, 4; Concepción, Tucumán, 1; Las Pavas, Tucumán, 1; Tierra del Fuego, 2; Lago Fagnano, Tierra del Fuego, 1).

Buteo polyosoma exsul Salvin.[1] MAS AFUERA BUZZARD.

Buteo exsul Salvin, Ibis, (3), **5**, p. 371, July, 1875—Mas Afuera Island (type in Salvin-Godman Collection, now in the British Museum); Swann, Monog. Bds. Prey, **1**, p. 417, 1928—Mas Afuera (monog.).

Buteo erythronotus (not of King) Sclater, Ibis, 1871, p. 182—Mas Afuera; Reed, l.c., 1874, p. 84—Mas Afuera; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 172, 1874—part, spec. n, Mas Afuera; Johow, Est. Flora Island, Juan Fernandez, p. 237, 1896—Mas Afuera.

Buteo erythronotus exsul Swann, Syn. List Accip., p. 52, 1919—Mas Afuera; Lönnberg, in Skottsberg, Nat. Hist. Juan Fernandez and Easter Island, **3**, (1), p. 9, 1921—Mas Afuera and Mas A Tierra; Swann, Syn. Accip., p. 86, 1921—Mas Afuera.

Buteo polyosoma exsul Stresemann, Journ. Orn., **73**, p. 315, 1925—Mas Afuera (crit.); Peters, Bds. World, **1**, p. 230, 1931—Juan Fernandez Islands.

Range.—Breeds on Mas Afuera, visitant on Mas A Tierra, Juan Fernandez Islands, off Chile.

***Buteo poecilochrous** Gurney.[2] GURNEY'S RED-BACKED BUZZARD.

Buteo poecilochrous Gurney, Ibis, (4), **3**, p. 176, April, 1879—Yanayacu, Ecuador (descr. of female in melanistic phase; type in Salvin-Godman Collection, now in British Museum, examined); Berlepsch and Stolzmann,

[1] *Buteo polyosoma exsul* Salvin: Similar to *B. p. polyosoma* but slightly larger; above somewhat darker with white edges to the interscapulars and wing coverts; female with back dark gray as in the male, not rufous. Wing, 380, (female) 418–430. A female in first year plumage has the upper back strongly suffused with rufous, while adults of both sexes lack this color altogether. Five specimens from Mas Afuera examined.

[2] *Buteo poecilochrous* Gurney is a little known bird of unsettled status. Stresemann's principal criterion, the proportion of the fifth primary (equal to or even longer than the third), holds only in half of the specimens listed by him, all of which have been examined by the senior author. Even in the type, the fifth primary is decidedly shorter than the third.

In normal plumage both sexes are indistinguishable from the corresponding stages of *B. polyosoma* as far as coloration is concerned. The melanistic variety of the male is extremely similar to that of *B. polyosoma*, but generally darker, more blackish below; the thighs as well as the anal region are barred with grayish or white, the under tail coverts white, while these parts in *polyosoma* are practically uniform gray. The female in the melanistic phase also is not unlike the corresponding variant of *polyosoma*, but the lower abdomen, instead of being rufous, is barred black and white (with, however, a few rufous bars intermixed in a bird from Tarapaca), and the under tail coverts are white (not deep slate gray). It should be noted, however, that the type has some large rufous spots on the breast. An adult female from the Cordillera of Colchagua, central Chile, combines the rufous breast of *polyosoma* with the white under tail coverts of *poecilochrous*, while the

Ornis, **13**, p. 104, 1906—Cuzco, Peru; Swann, Syn. List Accip., p. 51, 1919—Ecuador to Chile and Argentina; Chapman, Bull. U. S. Nat. Mus., **117**, p. 59, 1921—La Raya, Peru (crit.); Swann, Syn. Accip., p. 84, 1921—Ecuador to Chile (crit.); Lönnberg and Rendahl, Ark. Zool., **14**, No. 25, p. 40, 1922—Pichincha, Chaupicruz, Chilogallo, near Cotogallo, and Tumbaco, Ecuador (crit.); Stresemann, Journ. Orn., **73**, pp. 310, 316, 1925—Ecuador (Yanayacu, Quito), Peru (Ccachupata), Bolivia (Challapata, Choquecamate), Chile (Macaya) and Jujuy (Rinconada) (crit.; meas.); Chapman, Bull. Amer. Mus. N. H., **55**, p. 229, 1926—Bestion, Ecuador (crit.); Swann, Monog. Bds. Prey, **1**, p. 415, 1928 (monog.); Peters, Bds. World, **1**, p. 229, 1931 (range); (?)Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 42, 1936—Tucumán and La Rioja (Chilecito); Lehmann, Caldasia, **7**, p. 186, 1943—Rio Patia, Colombia; idem, Rev. Univ. del Cauca, **6**, p. 110, pls., 1945 (plumages; habits).

Buteo erythronotus (not *Haliaetus erythronotus* King) Sharpe, Cat. Bds. Brit. Mus., **1**, p. 172, 1874—part, spec. p–r, Ccachuapata, Peru; Sclater, Proc. Zool. Soc. Lond., 1886, p. 399—"Lalcalhuay," Tarapaca, Chile; idem, l.c., 1891, p. 135—part, Sacaya, Tarapaca, Chile; Lane, Ibis, 1897, p. 179—part, Sacaya, Tarapaca, Chile; Chubb, Ibis, 1919, p. 281—part, Choquecamate, Cochabamba, and Challapata, Oruro, Bolivia.

Tachytriorchis albicaudatus (not *Buteo albicaudatus* Vieillot) Bruch, Rev. Mus. La Plata, **11**, p. 251, 1904—Salta and Jujuy (spec. examined).

Buteo melanosternus Berlepsch and Stolzmann, Ornis, **13**, p. 104, Sept., 1906—Cuzco, Peru (descr. of melanistic female; type in Warsaw Museum).

Buteo erythronotus simonsi Swann, Syn. Accip., p. 85, Jan. 2, 1922—Challapata (Oruro), Bolivia (descr. of normal phase; type in British Museum).

Buteo hypospodius (not of Gurney) Lönnberg and Rendahl, Ark. Zool., **14**, No. 25, p. 37, 1922—Pichincha above Lloa, Ecuador (crit.); Stresemann, Journ. Orn., **72**, pp. 440, 441, 1924 (crit.).

Buteo (*polyosoma*) *poecilochrous* Bond and de Schauensee, Proc. Acad. Nat. Sci. Phila., **95**, p. 177, 1943—Callipampa, Tiraque, Bolivia.

faintly indicated light cross-markings on abdomen and thighs suggest the barred abdomen of *poecilochrous*. Yet according to size (wing 400, tail 190) and origin, this bird cannot be anything else than *polyosoma*. Its intermediary characters are apt to throw considerable doubt on the specific nature of the characters separating *poecilochrous* and *polyosoma*. There remains, on the other hand, the greater size of *poecilochrous*. The wing, in adult males, ranges from 420 to 450 (against 365–400 in *polyosoma*); in adult females, from 460–490 (against 400–440, once 455). If three adults from Tarapaca are unequivocally *poecilochrous* another male from the same region (Cancosa) is just as decidedly *polyosoma*. The only adult female in normal plumage examined from Ecuador and a melanistic female from Rinconada, Jujuy (recorded by Bruch as *Tachytriorchis albicaudatus*) are typical of *poecilochrous*. It will be seen that much remains yet to be learned about the inter-relationship of these hawks.

Additional material examined.—Ecuador: Yanayacu, 1 (the type); Mount Cotopaxi, 1.—Peru: High Peru (16,000–18,000 ft. elev.), 1; Ccachuapata, Dept. Anzco, 3.—Bolivia: Choquecamate, 2; Challapata, 1.—Chile: Tarapaca, Macaya, 1; three leagues southwest of Sacaya, 1; "Lalcalhuay," 1.—Argentina: Rinconada, Jujuy, 1.

Range.—Andes (chiefly Puno and Paramo zone) of southwestern Colombia, Ecuador, Peru, Bolivia, northwestern Argentina (Rinconada, Jujuy) and northern Chile (Tarapaca).

Field Museum Collection.—16: Ecuador (Cerro Guamani, Chimborazo, 1; Cerro Chimborazo, 6; Llanganate, Tunguragua, 2; Yanaurcu, Azuay, 2); Peru (Junín, 1; Yara, Arequipa, 1; Salinas, Arequipa, 1); Bolivia (Esperanza, Pacajes, La Paz, 2).

***Buteo regalis** (G. R. Gray). FERRUGINOUS ROUGH-LEG.

Falco ferrugineus (not of Nordmann 1835) Lichtenstein, Abhandl. Akad. Wiss. Berlin (Phys. Kl.) for 1838, p. 428, 1839—California=Monterey (type in Berlin Museum; cf. Stresemann, Orn. Monatsber., **30**, p. 83, 1922, and Grinnell, Univ. Calif. Pub. Zool., **38**, p. 267, 1932).

Archibuteo regalis G. R. Gray,[1] Gen. Bds., **1**, (1), pl. vi, May, 1844—no locality (type from Real del Monte, Hidalgo, Mexico, in the British Museum).

Archibuteo ferrugineus Cassin, Ill. Bds. Calif. etc., pp. 104, 159, pl. 26, 1854—Tulavie Valley, California; Ridgway, in Baird, Brewer and Ridgway, Hist. N. Amer. Bds., **3**, p. 300, 1874—Mexico (Real del Monte) and California (monog.); Bendire, Life Hist. N. Amer. Bds., **1**, p. 259, pl. 9, figs. 1, 2, 4 (eggs), 1892 (nesting habits); Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 54, 1899 (monog.); Brewster, Bull. Mus. Comp. Zool., **41**, p. 88, 1902—Sierra de la Laguna, Lower California; Swann, Syn. List Accip., p. 54, 1919 (chars.; range); Griscom and Crosby, Auk, **42**, p. 536, 1925—Norias, Texas (winter visitor); Huey, l.c., **43**, p. 353, 1926—south of Ensenada and Santo Domingo, Lower California.

Buteo californica Grayson, in Hutching's Calif. Mag., **1**, pp. 393, 396, fig. in text, March, 1857—California, vicinity of San José, Santa Clara County (no type preserved; cf. Bryant, Zoe, **2**, p. 40, 1891, and Grinnell, Univ. Calif. Pub. Zool., **38**, p. 267, 1932).

Buteo regalis Grinnell, Univ. Calif. Pub. Zool., **32**, p. 110, 1928—Lower California (winter visitant); Peters, Bds. World, **1**, p. 231, 1931 (range); Bent, Bull. U. S. Nat. Mus., **167**, p. 284, 1937 (range; habits).

Triorchis ferrugineus Swann, Syn. Accip., p. 88, 1921 (chars.; range).

Triorchis regalis Swann, Monog. Bds. Prey, **1**, p. 427, pls. 24, 25, 1928 (monog.).

Range.—Breeds from southern Washington, southwestern Saskatchewan, and southern Manitoba to southern California, Utah, Colorado, and Kansas; winters south to Lower California, Texas and northern Mexico (Real del Monte, Hidalgo); casual east to Wisconsin and Illinois.[2]

[1] *Archibuteo regalis* G. R. Gray (List Spec. Bds. Brit. Mus., Part 1, Accipitres, p. 19, after Feb. 12, 1844) from Real del Monte, Mexico, is a nomen nudum.

[2] Sennett's record (Bull. U. S. Geol. Geog. Surv. Terr., **4**, No. 1, p. 43, 1878) of the breeding of the Ferruginous Rough-Leg in the lower Rio Grande Valley, is doubtless due to confusion with some other species.

Field Museum Collection.—42: Alberta (Rosebud, 1); Saskatchewan (Maple Creek, 3); North Dakota (Eddy County, 5; Braddock, 2; Nelson County, 3; Towner County, 17); Kansas (Blue Rapids, Marshall County, 1); California (Dos Palos, Merced County, 1; San Bernardino County, 1; San Diego County, 1); Utah (Cedar City, Iron County, 2); Colorado (Larimer County, 1); Arizona (Salt River, Gila County, 1); New Mexico (Socorro County, 1); Texas (Corpus Christi, 1); Mexico (Bustillos, Chihuahua, 1).

***Buteo jamaicensis alascensis** Grinnell.[1] ALASKAN RED-TAILED HAWK.

Buteo borealis alascensis Grinnell, Univ. Calif. Pub. Zool., **5**, p. 211, Feb. 18, 1909—Glacier Bay, Alaska, and Port Frederick, Chichagof Island (types in Museum of Vertebrate Zoology, Berkeley, Calif.); Swarth, l.c., **7**, p. 61, 1911—Duke Island and Chickamin River, Sitka District, Alaska; Swann, Syn. List Accip., p. 48, 1919—Alaska; idem, Syn. Accip., p. 78, 1921—Alaska; idem, Monog. Bds. Prey, **1**, p. 395, 1926 (monog.); Taverner, Canad. Nat. Mus., Bull., **48**, p. 5, 1927—Alaska (crit.); idem, Condor, **38**, p. 69, 1936—Queen Charlotte Islands (crit.).

Buteo jamaicensis alascensis Peters, Bds. World, **1**, p. 231, 1931 (range).

Range.—Southeastern Alaska from Yakutat Bay to the Queen Charlotte and Vancouver Islands, British Columbia.

Field Museum Collection.—12: British Columbia (Graham Island, 5; Comox, Vancouver Island, 3; Campbell River, Vancouver Island, 3; Hagensborg, 1).

***Buteo jamaicensis harlani** (Audubon).[2] HARLAN'S HAWK.

Falco Harlani Audubon, Bds. Amer., folio ed., **1**, pl. 86, 1830; idem, Orn. Biog., **1**, p. 441, 1831—near St. Francisville, Louisiana (female cotype in British Museum examined).[3]

[1] *Buteo jamaicensis alascensis* Grinnell is described as resembling *B. j. borealis* but smaller throughout and having the dark areas blacker as well as more extensive. Wing, (adult males) 344–362, (adult female) 365; tail, 195, 218, (female) 207. Taverner at one time considered this form to be unworthy of recognition, but in his latest paper on these hawks admits it on account of its lesser size.

[2] *Buteo jamaicensis harlani* (Audubon), about which further information collected on its breeding grounds is urgently required, has been fully discussed by the late H. S. Swarth, who considered it a northwestern race of the *jamaicensis* group, a contention that seems to be well-founded.

[3] In spite of Taverner's doubts of its authenticity, there can be no question whatever that the British Museum specimen is the original of figure 2 of Audubon's plate, and that according to his own testimony (p. 441), it was given by him to that institution through J. G. Children, then in charge of the Zoology Department. The specimen is entered in the earliest handwritten Register, made prior to 1837, as "No. 100. Falco Harlani, Aud. a. North Americ. Purchd. Audubon." In List Spec. Brit. Mus., Part 1 (Accipitres), p. 18, 1844, it figures as "The Black

Buteo harlani Lawrence, Ann. Lyc. Nat. Hist. N. Y., **5**, p. 220, 1852—California; Baird, Cassin and Lawrence, Bds. N. Amer., p. 24, 1860—Fort Thorne, New Mexico; Ridgway, in Baird, Brewer and Ridgway, Hist. N. Amer. Bds., **3**, p. 292, 1874 (monog.); Sharpe, Cat. Bds. Brit. Mus., **1**, p. 191, 1874—part, Louisiana (descr. of type); Ridgway, Auk, **2**, pp. 165, 166, 1885 (crit.); Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 65, 1900—part, excl. of Mexican localities; Peters, Bds. World, **1**, p. 232, 1932 (range); Oberholser, Bird Life Louisiana, p. 167, 1938—Louisiana records.

Buteo cooperi Cassin, Proc. Acad. Nat. Sci. Phila., **8**, p. 253, for Oct., 1856—(Mountain View) Santa Clara (Valley), California (type in U. S. National Museum; cf. Grinnell, Univ. Calif. Pub. Zool., **38**, p. 266, 1932); Baird, Cassin and Lawrence, Bds. N. Amer., p. 31, pl. 16 (fig. of type), 1860—Santa Clara; Ridgway, Auk, **1**, p. 253, 1884 (crit. note on type); idem, l.c., **2**, pp. 165, 166, 1885 (crit.); Swann, Syn. List Accip., p. 49, 1919—California; Grinnell, Condor, **32**, p. 259, 1930 (crit. note on type).

Buteo borealis harlani Ridgway, Auk, **7**, p. 205, 1890 (crit.); Swann, Syn. List Accip., p. 47, 1919; idem, Syn. Accip., p. 78, 1921; idem, Monog. Bds. Prey, **1**, p. 394, 1926 (range imaginary); Swarth, Univ. Calif. Pub. Zool., **30**, p. 105, 1926—Atlin Region, British Columbia (breeding; crit.; plumages); Taverner, Canad. Nat. Mus. Bull., **48**, pp. 5, 10, 1927 (crit.); Brooks, Condor, **29**, p. 114 (in text), 1927 (disc.); Taverner, Condor, **38**, p. 67, 1936 (chars.; crit.); Bent, Bull. U. S. Nat. Mus., **167**, p. 174, 1937 (life hist.); Dixon, Fauna U. S. Nat. Parks, **3**, p. 45, 1938—Mt. McKinley (breeding).

Range.—Breeds in southeastern Alaska, southwestern Yukon, and northern British Columbia, in migration southeastward to the

Warrior, *Buteo harlani*, Audub. a. Young. North America. Presented by J. Audubon, Esq.," and in the second edition of that work (1848, p. 34) it is listed under *B. borealis* of which *F. Harlani* Aud. B. Amer. pl. 86 is quoted as synonym as "spec. n. North America. Presented by J. Audubon, Esq." It will be noted that no other specimen was known to exist until Lawrence recorded one from California in 1852. On comparing the British Museum example with Audubon's figure we do not find any difference which cannot be explained by conventional drawing or the artist's desire to emphasize certain characters of pattern. The black tail-bands are grossly exaggerated, and I have yet to see a hawk of the *jamaicensis* group with such broad, curiously shaped bars as those on Audubon's plate. On the other hand, the reddish tinge on both sides of the shaft is well pronounced in the British Museum bird, which has indeed the characteristically marbled tail with, however, several short cross-bands of black on either side of the shaft on the middle pair extending approximately over the inner half of the web. In Audubon's figure the brownish apical portion of the inner secondaries and their dusky bars are also very much exaggerated, as are also the dark cross-bands on the tibial feathers. To sum up, the slight discrepancies, more apparent than real, are certainly due to the inaccuracy of the drawing. The type is immature, the under parts showing extensive buffy white coloring at the basal portions of the feathers exactly as in a young male collected by E. L. Cameron on Oct. 15, 1890, in North Dakota and identified by the late H. S. Swarth as *harlani*. There are a good many records of Harlan's Hawk from various Louisiana localities between November and March and it may be regarded as a regular winter visitor to the lower Mississippi Valley. Audubon's type was obtained on Nov. 18, 1829, as we learn from his letter to Dr. Harlan, reproduced by Coues (Bull. Nutt. Orn. Cl., **5**, pp. 202–203, 1880).

upper Mississippi Valley, wintering in the lower Mississippi Valley; casual in California (Mountain View, Santa Clara County, Nov. 10, 1855)[1] and Pennsylvania (Watsontown).

Field Museum Collection.—23: Alaska (Takotna, 1); Alberta (Leduc, 1); North Dakota (Nelson County, 3; Rolette County, 1); Kansas (Burlington, 1; Hamilton, 11); Illinois (Lewistown, 2; Broughton, 2); Pennsylvania (Watsontown, 1).

***Buteo jamaicensis borealis** (Gmelin). EASTERN RED-TAILED HAWK.

Falco borealis Gmelin, Syst. Nat., **1**, (1), p. 266, 1788—based on "American Buzzard" Latham, Gen. Syn. Bds., **1**, (1), p. 50, and "Red-tailed Falcon" Pennant, Arct. Zool., **2**, p. 205, Carolina (type in Leverian Museum).[2]

Falco leverianus Gmelin, Syst. Nat., **1**, (1), p. 266, 1788—based on "Leverian Falcon" Pennant, Arct. Zool., **2**, p. 206, Carolina (type in Leverian Museum;[2] descr. of young).

Buteo ferruginicaudus Vieillot, Hist. Nat. Ois. Amer. Sept., **1**, p. 32, pl. 6, 1807—Carolina (type in coll. of P. L. Vieillot, ex Louis Bosc).

Accipiter ruficaudus Vieillot, Hist. Nat. Ois. Amer. Sept., **1**, p. 43, pl. 14 bis, 1807—Virginia (type in coll. of M. Palisot-Beauvais, Paris).

Buteo americanus Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **4**, p. 477, 1816—based on Vieillot, Hist. Nat. Ois. Amer. Sept., **1**, pl. 6.

Buteo calurus Cassin, Proc. Acad. Nat. Sci. Phila., **7**, No. 7, for Jan.–Feb., p. 281, pub. May 22, 1855—Fort Webster (Rio Mimbres), New Mexico (type in collection of the Academy of Natural Sciences of Philadelphia; cf. Stone, Proc. Acad. Nat. Sci. Phila., 1899, p. 29); Baird, Cassin and Lawrence, Bds. N. Amer., **22**, pl. 14, 1860—Fort Webster, New Mexico and Petaluma, California.

(*Buteo borealis*) var. *borealis* Ridgway, in Baird, Brewer and Ridgway, Hist. N. Amer. Bds., **3**, p. 282, 1874 (monog.).

(*Buteo borealis*) var. *lucasanus* Ridgway,[3] in Baird, Brewer and Ridgway, Hist. N. Amer. Bds., **3**, p. 285, Jan., 1874—Peninsula of Lower California (type from Cape San Lucas, in U. S. National Museum).

(*Buteo borealis*) var. *calurus* Ridgway, in Baird, Brewer and Ridgway, Hist. N. Amer. Bds., **3**, p. 286, 1874 (monog.).

Buteo borealis Sharpe, Cat. Bds. Brit. Mus., **1**, p. 188, 1874—in part, excl. of Jamaica, Cuba, and West Indies; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 61, 1900—Mexico and Guatemala (in part).

[1] The Mexican records are all more or less questionable. The eggs from Brownsville, Texas, ascribed to *B. j. harlani* by Swann, cannot have belonged to this hawk, which is now known to breed in northwestern North America.

[2] This specimen did not come to the Vienna Museum.

[3] *Buteo lucasanus* Ridgway (Coues, Key N. Amer. Bds., p. 216, 1872) is a nomen nudum.

(*Buteo borealis*) subsp. and *Buteo montanus* (not of Nuttall) Sharpe, Cat. Bds. Brit. Mus., **1**, p. 189, 1874—part, western North America and Mexico.

Buteo rufescentior Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 63 (in text), November, 1900—"Sitka and British Columbia to California" (no type designated).[1]

Buteo borealis calurus Brewster, Bull. Mus. Comp. Zool., **41**, p. 83, 1902—Lower California (crit.; meas.); Phillips, Auk, **28**, p. 73, 1911—Galindo, Tamaulipas, Mexico; Swann, Syn. List Accip., p. 47, 1919 (chars.; range); idem, Syn. Accip., p. 77, 1921; Swarth, Univ. Calif. Pub. Zool., **24**, pp. 211, 336, 1922—Stikine and Skeena River regions, British Columbia; Swann, Monog. Bds. Prey, **1**, p. 392, 1926 (monog.); Taverner, Canad. Nat. Mus. Bull., **48**, p. 3, 1927 (crit.); Grinnell, Univ. Calif. Pub. Zool., **32**, p. 108, 1929—Peninsula of Lower California; Griscom, Bull. Amer. Mus. N. H., **64**, p. 153, 1932—Momostenango, Guatemala; van Rossem, Bull. Mus. Comp. Zool., **77**, p. 428, 1934—Sonora (Calamos, Pinos Alto) and Chihuahua (Jesus Maria); Taverner, Condor, **38**, p. 66, 1936 (crit.); Bent, Bull. U. S. Nat. Mus., **167**, p. 167, 1937 (life hist.).

Buteo borealis borealis Swann, Syn. List Accip., p. 47, 1919 (chars.; range); idem, Syn. Accip., p. 77, 1921 (range); idem, Monog. Bds. Prey, **1**, p. 389, 1926 (monog.); Taverner, Canad. Nat. Mus. Bull., **48**, p. 3, 1927 (crit.); idem, Condor, **38**, p. 66, 1936 (crit.); Bent, Bull. U. S. Nat. Mus., **167**, p. 147, 1937 (life hist.; distrib.).

Buteo borealis lucasanus Swann, Syn. Accip., p. 77, 1921—Peninsula of Lower California; idem, Monog. Bds. Prey, **1**, p. 393, 1926 (monog.).

Buteo jamaicensis borealis Peters, Bds. World, **1**, p. 231, 1931 (range).

Buteo jamaicensis calurus van Rossem, Occ. Pap., Mus. Zool. Louisiana State Univ., **21**, p. 55, 1945—Sonora (resident).

Range.—Breeds from the central Yukon, Mackenzie, northern Saskatchewan, northern Manitoba, southern Quebec and Newfoundland south to southern Lower California, central southern Texas, northeastern Oklahoma, Alabama and northern Florida; winters from southwestern British Columbia and the south central United States south to the Gulf coast and Guatemala; casual to Panama (one record from the south slope of the Volcan de Chiriqui).[2]

[1] Inspection of the British Museum series shows that the name *B. rufescentior* refers to specimens of "*calurus*," with more or less rufescent breasts, spotted upper belly and distinct rufescent bars on the thighs, from Colorado (Jolon), New Mexico (Santa Fe), Utah (Salt Lake City), California (Walker's Basin), and Mexico (Zacatecas, Zapotlan, Jalisco). The Guatemalan and Nicaraguan birds mentioned are *costaricensis*. From the way the name was introduced and the fact that no marked type exists, we infer that it was intended rather as a designation for certain color varieties found within the range of the *jamaicensis* complex as a whole.

[2] The adult bird secured on the Volcan de Chiriqui by E. Arce in 1870, a specimen of the normal "*calurus*" type with cross-banded tail, is strongly rufescent on crown and hindneck, has a deep rufous brown jugular band, strongly spotted abdomen, and conspicuously barred thighs. It is a perfect match for a male

Field Museum Collection.—117: Yukon Territory (Yukon River, 2); British Columbia (Comox, Vancouver Island, 2; Victoria, 2); Alberta (Calgary, 1; Rosebud, 2); Saskatchewan (Prince Albert, 1); Manitoba (Winnipeg, 2); Washington (Tacoma, 1); Oregon (Jackson County, 2; Enterprise, 1; Tillamook, 1); California (Placer County, 1; San Francisco, 2; Monterey County, 2; Riverside County, 1; Alameda County, 2; San Bernardino County, 1; San Diego County, 3); Arizona (Cochise County, 1; Coconino County, 1; Phoenix, 3; Tucson, 3; Calabasas, 1); Montana (Columbia Falls, 1; Gallatin County, 1; Park County, 1); Colorado (Manitou Park, 1; New Castle, 1; Larimer County, 1; Buford, 1); New Mexico (Mimbres, 1; Carrizozo, 1); Nebraska (Lincoln, 2); Iowa (Iowa City, 1); Missouri (Kansas City, 1); Arkansas (Fayetteville, 1; Woolsey, 1); Wisconsin (Beaver Dam, 10; Polk County, 1; Vernon County, 1; Delavan, 1); Illinois (Lake County, 2; Peru, 1; Henry, 1; Lewistown, 3; Warsaw, 1; Will County, 3); Indiana (Ingalls, 1; Porter County, 1; Bluffton, 8); Connecticut (New London County, 2; Stamford, 3; Litchfield County, 5; New Haven County, 10); Georgia (Chatham County, 1; Roswell, 2); Mexico (Agua Caliente, Lower California, 1; Sierra de Laguna, Lower California, 1; Puerto del Chiarito, Durango, 1; Minaca, Chihuahua, 1; Chilpancingo, Guerrero, 3).

*Buteo jamaicensis kriderii Hoopes. KRIDER'S HAWK.

Buteo borealis var. *Kriderii* Hoopes, Proc. Acad. Nat. Sci. Phila., 1873, p. 238, pl. 5, June, 1873—Winnebago County, Iowa (type in collection of the Academy of Natural Sciences of Philadelphia; cf. Stone, Proc. Acad. Nat. Sci. Phila., 1899, p. 26).

(*Buteo borealis*) var. *krideri* Baird, Brewer and Ridgway, Hist. N. Amer. Bds., 3, p. 284, 1874 (monog.).

Buteo borealis krideri(i) Swann, Syn. List Accip., p. 47, 1919 (chars.; range); idem, Syn. Accip., p. 77, 1921 (range); idem, Monog. Bds. Prey, 1, p. 391, 1926 (monog.); Taverner, Canad. Nat. Mus. Bull., 48, p. 4, 1927 (crit.); idem, Condor, 38, p. 67, 1936 (crit.); Bent, Bull. U. S. Nat. Mus., 167, p. 165, 1937 (life hist.).

Buteo jamaicensis kriderii Peters, Bds. World, 1, p. 231 (range).

Range.—Breeds in the Great Plains region of the United States from Wyoming to Minnesota and south to Nebraska and Missouri; winters south to Texas and the Gulf coast.

from Fort Klamath, Oregon. The occurrence of this hawk in Panama is certainly exceptional.

After examining a large series we are inclined to agree with Peters in uniting *calurus* to *borealis*.

Field Museum Collection.—31: Wyoming (New Castle, 1); North Dakota (Eddy County, 1; Nelson County, 3; Ramsey County, 4; Rolette County, 5); Nebraska (Lancaster County, 3); Texas (Skidmore, 2; Port Lavaca, 1); Minnesota (Owatonna, 1; Roseau County, 4); Kansas (Hamilton, 4); Illinois (Lee County, 1); Florida (Orange County, 1).

***Buteo jamaicensis fuertesi** Sutton and Van Tyne.[1] FUERTES' HAWK.

Buteo jamaicensis fuertesi Sutton and Van Tyne, Occ. Pap., Mus. Zool. Univ. Mich., **321**, p. 1, Sept. 23, 1935—Calamity Creek Bridge, 22 miles south of Alpine, Brewster County, Texas (type in Museum of Zoology, University of Michigan); Taverner, Condor, **38**, p. 70, 1936 (crit.); Sutton and Van Tyne, Misc. Pub., Mus. Zool. Univ. Mich., **37**, p. 19, col. pl., 1937—Brewster County, Texas; van Rossem, Auk, **59**, p. 450, 1942—Arizona (Chiricahua Mountains), New Mexico (Catron County), Mexico (Hermosillo, Sonora; Colonia Pacheco, Chihuahua).

Range.—Breeds in southwestern Texas, probably also southern New Mexico and adjoining parts of Mexican states of Chihuahua, Coahuila and Nuevo Leon.

Field Museum Collection.—3: Texas (Kerrville, 2); Mexico (Cerro Potosi, Nuevo Leon, 1).

***Buteo jamaicensis umbrinus** Bangs.[2] FLORIDA RED-TAILED HAWK.

Buteo borealis umbrinus Bangs, Proc. New Eng. Zool. Cl., **2**, p. 68, July 31, 1901—Myakka, Manatee County, Florida (type in coll. of E. A. and O. Bangs, now in Museum of Comparative Zoology, Cambridge, Mass.; cf. Bangs, Bull. Mus. Comp. Zool., **70**, p. 188, 1930); Swann, Syn. List Accip., p. 48, 1919—part, Florida; idem, Syn. Accip., p. 79, 1921—part, Florida; idem, Monog. Bds. Prey, **1**, p. 396, 1926—part, Florida; Bent, Bull. U. S. Nat. Mus., **167**, p. 178, 1937—Florida (life hist.).

[1] *Buteo jamaicensis fuertesi* Sutton and Van Tyne: Similar to the light phase of *borealis* but under parts, including under side of wing, much paler; band of dark streaks across lower breast and flanks greatly reduced, the streaking very much attenuated or even reduced to a mere hair-line along the shaft of the feather; thighs pale, immaculate or but slightly barred; barring on tail and upper tail coverts much reduced. Resembles *B. j. kriderii* in paleness of under parts, but is readily distinguished by its dark upper surface and lack of white at base of tail. Wing, 385–402, (female) 425–436; tail, 205–224, (female) 220–228.

[2] *Buteo jamaicensis umbrinus* Bangs: Most similar to *B. j. borealis* but lower throat and middle of belly marked with broad stripes and bands of deep brown; tail feathers, aside from the black subterminal band, with mere traces of dusky spots or crossbars. Wing, 403–412, (female) 420–440.

One additional specimen from Tarpon Springs, Florida, examined.

Buteo jamaicensis umbrinus Peters, Bds. World, 1, p. 231, 1931—part, Florida Peninsula.

Range.—Florida Peninsula.

Field Museum Collection.—1: Florida (Enterprise, Volusia County, 1).

***Buteo jamaicensis solitudinis** Barbour.[1] CUBAN RED-TAILED HAWK.

Buteo borealis solitudinis Barbour, Occ. Pap. Bost. Soc. N. H., 8, p. 207, July 24, 1935—Solidad de Cienfuegos, Cuba (type in Museum of Comparative Zoology, Cambridge, Mass.).

Buteo borealis (not *Falco borealis* Gmelin) Lembeye, Av. Cuba, p. 18, pl. 1, fig. 2, 1850—Trinidad and Cienfuegos, Cuba; Gundlach, Journ. Orn., 2, "1854," Erinnerungss., p. lxxxii, 1855—Cuba (breeding); idem, in Poey, Repert. Hist. Nat. Cuba, 1, p. 223, 1865—Cuba (breeding in March); Bryant, Proc. Bost. Soc. N. H., 11, p. 64, 1866—Nassau (New Providence) and Inagua, Bahama Islands; Gundlach, Journ. Orn., 19, p. 365, 1871—Cuba (habits, nest and eggs descr.); Cory, Bds. Bahamas, p. 131, 1880—Bahama Islands (ex Bryant); idem, Auk, 4, p. 39, 1887—part, Cuba and Bahama Islands; idem, Bds. W. Ind., p. 197, 1889—part, Cuba and Bahama Islands; idem, Auk, 8, p. 350, 1891—Abaco, Bahama Islands; idem, Cat. W. Ind. Bds., p. 99, 1892—part, Cuba and Bahama Islands (Abaco, New Providence, Inagua); Riley, in Shattuck, The Bahama Islands, p. 362, 1905—Abaco, Little Abaco, New Providence, Andros, and Great Inagua, Bahama Islands.

Buteo borealis calurus (not of Cassin) Chapman, Bull. Amer. Mus. N. H., 4, p. 294, 1892—Trinidad, Cuba (crit.).

Buteo borealis umbrinus (not of Bangs) Bonhote, Ibis, 1892, p. 296—Little Abaco (crit.; nest and eggs descr.); Swann, Syn. List Accip., p. 48, 1919—part, Bahama Islands; idem, Syn. Accip., p. 79, 1922—part, Bahama Islands and Cuba; Barbour, Mem. Nutt. Orn. Cl., 6, p. 46, 1923—Cuba; Swann, Monog. Bds. Prey, 1, p. 396, 1926—part, Bahama Islands and Cuba.

Buteo jamaicensis umbrinus Peters, Bds. World, 1, p. 231, 1931—part, Cuba, Isle of Pines and Bahama Islands.

Range.—Bahama Islands (Abaco, Little Abaco, New Providence, Andros, Great Inagua) and the island of Cuba (including Isle of Pines), Greater Antilles.

[1] *Buteo jamaicensis solitudinis* Barbour: Similar in coloration to *B. j. umbrinus*, but somewhat smaller. Wing, 375, (female) 395–411.

An adult female from Little Abaco is identical in size (wing, 390) and color with one from Cuba (San Cristobal), while a male from the same Bahaman island has even shorter wings (350 mm.) than the figures given by Barbour for a Cuban male. If *solitudinis* is separated from the Florida Red-tail, Bahaman birds must undoubtedly go with the Cuban race. Its claims to recognition require, however, substantiation by a fuller series. *B. j. jamaicensis* of Jamaica and Hispaniola, while similar in coloration, is still smaller (wing, males 335–360, females 365–375).

Field Museum Collection.—6: Bahama Islands (Abaco, 1); Cuba (Las Palacios, Pinar del Rio, 2; Candelaria, Pinar del Rio, 1; Artemisia, Pinar del Rio, 1; La Deseada, San Cristobal, 1).

***Buteo jamaicensis jamaicensis** (Gmelin). WEST INDIAN RED-TAILED HAWK.

Falco jamaicensis Gmelin, Syst. Nat., **1**, (1), p. 266, 1788—based on "Cream-coloured Buzzard" Latham, Gen. Syn. Bds., **1**, (1), p. 49, Jamaica (type in coll. of J. Latham).

Buteo fulvus Vieillot, Hist. Nat. Ois. Amer. Sept., **1**, p. 34, 1807—"Saint Dominique et la Jamaique" (substitute name for *Falco jamaicensis* Gmelin).

Buteo borealis (not *Falco borealis* Gmelin) March, Proc. Acad. Nat. Sci. Phila., 1863, p. 151—Jamaica (habits); Gundlach, Journ. Orn., **22**, p. 310, 1874—Puerto Rico; idem, l.c., **26**, pp. 158, 163, 1878—Puerto Rico; idem, Anal. Soc. Esp. Hist. Nat., **7**, p. 159, 1878—Puerto Rico; Cory, Auk, **4**, p. 39, 1887—part, Jamaica and Puerto Rico; idem, Bds. W. Ind., p. 197, 1889—part, Jamaica and Puerto Rico; idem, Auk, **8**, p. 48, 1891—St. Kitts; idem, Cat. W. Ind. Bds., p. 99, 1892—part, Jamaica, Haiti, Puerto Rico, and St. Christopher; Bowdish, Auk, **19**, p. 361, 1902—Puerto Rico; Wetmore, Bull. U. S. Dept. Agric., **326**, p. 33, 1916—Puerto Rico and Vieques; idem, Auk, **33**, p. 410, 1916—Vieques; idem, l.c., **33**, p. 410, 1916—Vieques; idem, l.c., **34**, p. 57, 1917—Culebra Island; Struthers, l.c., **40**, p. 472, 1923—Mayaguez, Puerto Rico (nest); Danforth, Journ. Dept. Agric. Porto Rico, **10**, p. 84, 1926—Cartagena Lagoon, Puerto Rico.

Buteo tropicalis Verrill, Proc. Acad. Nat. Sci. Phila., **61**, p. 357, 1909—San Lorenzo, Dominican Republic (type in coll. of A. E. and A. H. Verrill= immature); Swann, Syn. List Accip., p. 49, 1919 (ex Verrill).

Buteo borealis jamaicensis Peters, Bull. Mus. Comp. Zool., **61**, p. 399, 1917—Choco, Dominican Republic (crit.); Swann, Syn. Accip., p. 79, 1922—Jamaica, San Domingo and (?)Puerto Rico (chars.); idem, Monog. Bds. Prey, **1**, p. 396, 1926 (monog.); Wetmore, Sci. Surv. Porto Rico and Virgin Islands, **9**, p. 320, 1927—Puerto Rico, Vieques, and Culebra (monog.); Danforth, Auk, **45**, p. 482, 1928—Jamaica; Bond, Proc. Acad. Nat. Sci. Phila., **80**, p. 493, 1928—Haiti; Danforth, Auk, **46**, p. 362, 1929—Hispaniola; Moltoni, Atti Soc. Ital. Sci. Nat., **68**, p. 310, 1929—Moca, Dominican Republic; Danforth, Journ. Dept. Agric. Porto Rico, **14**, p. 114, 1930—St. Croix, St. Thomas, St. John and Tortola; Beatty, l.c., p. 138, 1930—St. Croix; Danforth, l.c., **15**, p. 47, 1931—Puerto Rico; Wetmore and Swales, Bull. U. S. Nat. Mus., **155**, p. 110, 1931—Hispaniola (monog.); Danforth, Trop. Agric., **13**, p. 214, 1936—St. Kitts and Nevis.

Buteo jamaicensis jamaicensis Peters, Bds. World, **1**, p. 231, 1931 (range); Wetmore, Proc. U. S. Nat. Mus., **81**, art. 2, p. 14, 1932—Gonave Island, Petite Cayemite, Hispaniola; idem and Lincoln, l.c., **82**, art. 25, p. 21, 1933—Hispaniola; Bond, Bds. W. Ind., p. 66, 1936—Jamaica, Hispaniola, Puerto Rico, Virgin Islands, Saba, St. Eustatius, St. Kitts, Nevis and (?)Montserrat.

Range.—Islands of Jamaica, Hispaniola (including surrounding islands), Puerto Rico, the Virgin Islands, Saba, St. Eustatius, St. Kitts, Nevis and possibly Montserrat.

Field Museum Collection.—3: Jamaica (unspecified, 2); Lesser Antilles (St. Kitts, 1).

Buteo jamaicensis fumosus Nelson.[1] TRES MARIAS RED-TAILED HAWK.

Buteo borealis fumosus Nelson, Proc. Biol. Soc. Wash., **12**, p. 7, Jan. 27, 1898—Maria Madre Island, Tres Marias group, Mexico (type in U. S. National Museum); idem, N. Amer. Fauna, **14**, p. 37, 1899—Maria Madre, Maria Magdalena and Maria Cleofa (descr. of imm.; meas.); Swann, Syn. List Accip., p. 48, 1919 (chars.); idem, Syn. Accip., p. 80, 1922 (chars.); McLellan, Proc. Calif. Acad. Sci., (4), **15**, p. 297, 1926—Maria Madre Island; Swann, Monog. Bds. Prey, **1**, p. 397, 1928 (monog.).

Buteo borealis var. *montana* (not *Buteo montanus* Nuttall) Grayson, Proc. Bost. Soc. N. H., **14**, p. 268, 1871—Tres Marias Islands.

Buteo borealis var. *calurus* (not *Buteo calurus* Cassin) Lawrence, Mem. Bost. Soc. N. H., **2**, p. 301, 1874—part, Tres Marias Islands.

Buteo borealis var. *costaricensis* Ridgway, in Baird, Brewer and Ridgway, Hist. N. Amer. Bds., **3**, p. 285, 1874—part, Tres Marias Islands (descr. of young).

Buteo fumosus Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 65, 1900—Tres Marias Islands.

Buteo jamaicensis fumosus Peters, Bds. World, **1**, p. 232, 1931—Tres Marias Islands.

Range.—Tres Marias Islands, off western Mexico.

Buteo jamaicensis socorroensis Nelson. SOCORRO RED-TAILED HAWK.

Buteo borealis var. *montanus* (not *Buteo montanus* Nuttall) Lawrence, Proc. Bost. Soc. N. H., **14**, p. 301, 1871—Socorro Island (no descr.).

Buteo borealis socorroensis Ridgway, Proc. U. S. Nat. Mus., **3**, p. 220, 1880 (nomen nudum); Townsend, l.c., **13**, p. 135, 1890—Socorro Island (nomen nudum); Nelson,[2] Proc. Biol. Soc. Wash., **12**, p. 7 (in text), Jan. 12,

[1] *Buteo jamaicensis fumosus* Nelson is said to differ from *B. j. socorroensis* by being darker, more uniformly marked below, and by lacking the lighter areas on the throat and breast. On the dorsal surface *fumosus* is stated to be readily distinguishable by the uniform smoky brown head and neck, and the lack of rusty edgings to the neck and wing feathers.

[2] Though not formally describing the Socorro bird, Nelson lists its measurements in comparison to *B. j. fumosus* and also mentions certain color characters, so that the name *socorroensis* would seem to be acceptable under the Rules. The first proper description of *B. j. socorroensis* appeared in the "Biologia" from notes supplied by Ridgway. The co-types are in the United States National Museum.

1898—Socorro Island; Swann, Syn. List Accip., p. 48, 1919—Socorro Island; idem, Syn. Accip., p. 80, 1922—Socorro Island (chars.); McLellan, Proc. Calif. Acad. Sci., (4), **15**, p. 297, 1926—Socorro Island (nest; descr.); Swann, Monog. Bds. Prey, **1**, p. 397, 1928 (monog.).

Buteo borealis var. *costaricensis* (not of Ridgway) Lawrence, Mem. Bost. Soc. N. H., **2**, p. 302, 1874—Socorro Island.

Buteo socorroensis Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 64, 1900—Socorro Island (descr.).

Buteo jamaicensis socorroensis Peters, Bds. World, **1**, p. 232, 1931 (range).

Range.—Socorro Island, off western Mexico.

***Buteo jamaicensis costaricensis** Ridgway.[1] COSTA RICAN RED-TAILED HAWK.

Buteo borealis var. *costaricensis* Ridgway, in Baird, Brewer and Ridgway, Hist. N. Amer. Bds., **3**, p. 285 (note), Jan., 1874—Costa Rica (type in U. S. National Museum); Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 61, 1900—part, Guatemala (in part) to Panama.

Buteo borealis (not *Falco borealis* Gmelin) Sclater and Salvin, Proc. Zool. Soc. Lond., 1864, p. 369—Panama Railroad.

Buteo borealis var. *montanus* (not *Buteo montanus* Nuttall) Lawrence, Ann. Lyc. Nat. Hist. N. Y., **9**, p. 133, 1868—San José and Los Tabacales, Costa Rica; Frantzius, Journ. Orn., **17**, p. 368, 1869—Costa Rica.

(*Buteo borealis*) subsp. a. *Buteo montanus* Sharpe, Cat. Bds. Brit. Mus., **1**, p. 189, 1874—part, spec. m–o, Costa Rica (San José), Guatemala and Panama.

Buteo borealis costaricensis Nutting, Proc. U. S. Nat. Mus., **5**, p. 404, 1882—La Palma de Nicoya, Costa Rica; idem, l.c., **5**, p. 377, 1883—San Juan del Sur, Nicaragua; Zeledon, Anal. Mus. Nac. Costa Rica, **1**, p. 126, 1887—Cartago and Santa Maria de Dota, Costa Rica; Carriker, Ann. Carnegie Mus., **6**, p. 457, 1910—San Lucas de Dota and Azahar de Cartago, Costa Rica; Swann, Syn. List Accip., p. 48, 1919—Costa Rica to Panama; idem, Syn. Accip., p. 78, 1922—Guatemala to Panama; idem,

[1] *Buteo jamaicensis costaricensis* Ridgway differs from *B. j. borealis* (including "*calurus*") by the absence (or mere suggestion) of the rufescent edgings to the feathers of the hindcrown, nape and upper back; by the whiter under parts with little, if any, rufescent tinge, the throat being mostly white or but sparingly streaked with dusky and the breast frequently immaculate; and by the indistinctness or sometimes the absence of barring of the tibial feathers.

Unequivocal specimens of this form have been examined from British Honduras (Southern Pine Ridge, Western District), Guatemala (Duenas; San Gerónimo; San Martín, Quezaltenango), Nicaragua (Matagalpa; El Volcan, Chinandega), Costa Rica (Los Tabacoles), and Veraguas (Calobre, Castillo). From Mexico, which is included in its breeding range, we have seen only winter birds, all of which appear to be referable to *B. j. borealis* (*calurus*).—C.E.H.

Four adult birds taken in Michoacan in July and August are in Field Museum. Two are in the dark phase and show no rufescent coloration except on the tail. Of the two others one is slightly rufescent about the crown and nape and quite rufescent below, with the throat and chest moderately streaked with dusky, while the other has no rufescent edges to the crown and nape, but is very dusky on the throat and upper chest and slightly rufescent on the belly and thighs.—B.C.

Monog. Bds. Prey, **1**, p. 395, 1926—Guatemala to Panama (monog.); Griscom, Bull. Amer. Mus. N. H., **64**, p. 154, 1932—Tecpam (July), San Lucas (June), and Panajachel (Sept.), Guatemala.

Buteo costaricensis Bangs, Proc. New Eng. Zool. Cl., **3**, p. 20, 1902—Boquete, Chiriqui.

Buteo jamaicensis costaricensis Peters, Bds. World, **1**, p. 232, 1931—southern Mexico to Panama; idem, Bull. Mus. Comp. Zool., **71**, p. 310, 1931—Changuinola, Almirante, Panama (Dec. 9); Griscom, l.c., **78**, p. 298, 1935—Mountains of Veraguas, Panama; Dickey and van Rossem, Field Mus. Nat. Hist., Zool. Ser., **23**, p. 109, 1938—El Salvador (crit.).

Range.—Highlands of southern Mexico (Michoacan), Guatemala, British Honduras, El Salvador, Nicaragua, Costa Rica, and Panama east to the Canal Zone.[1]

Field Museum Collection.—11: Mexico, Michoacan (Tancitaro, 3; Patzcuaro, 1); Guatemala (Tecpam, Chimaltenango, 1); El Salvador (Volcan San Miguel, 1); Honduras (Cerro Cantoral, Tegucigalpa, 3); Costa Rica (Zarcero, Alajuela, 1); Panama (Boquete, Chiriqui, 1).

[1] A very puzzling bird is the hawk described by Gould as *Buteo ventralis*. In addition to the type (Reg. No. 55. 12. 19. 204), collected by Darwin at Santa Cruz, the British Museum has a female secured by D. S. Bullock on April 14, 1906, at Maquehue, Temuco, Chile. They are very much alike, the Maquehue example differing merely by having the lateral edges to the nape-feathers white rather than cinnamomeous, seven instead of eight dark tailbands, and doubtless because of its fresh unfaded condition, blacker dorsal coloration and markings below. The two birds bear a remarkable likeness to the immature stage of *B. j. costaricensis*, have the same strong feet and toes and the four superprimaries deeply incised, but differ by having shorter tails with seven to eight alternate bands of brown and black of equal width (about 10 mm.), whereas in *B. j. costaricensis* the rectrices are grayish brown, more or less tinged with ochraceous and crossed by eight to ten narrow (not more than 5 mm. wide) dusky bars, which are about one-fourth of the width of the pale interspaces. It is hard to believe that in the extreme south of South America a local breeding race of the Red-tailed Hawk has escaped the researches of naturalists, unless we assume it to be on the verge of extinction, which seems altogether unlikely. Until more specimens are available and the adult plumage becomes known, the status of *B. ventralis* will have to be left in abeyance. Hellmayr's remark (Field Mus. Nat. Hist., Zool. Ser., **19**, p. 275, 1932) about its identity with the juvenile plumage of *B. polyosoma* is due to comparison with a specimen erroneously labeled as type, which is indeed a young Red-backed Hawk. The type is the bird listed by Sharpe (Cat. Bds. Brit. Mus., **1**, p. 190) as spec. p, juv., under *Buteo borealis* subsp. a. *B. montanus*.

The two specimens of *B. ventralis* measure as follows: Wing, 370 (type), 355 (Maquehue); tail, 220.

The synonymy of this unsettled form is here appended.

Buteo ventralis Gould, Proc. Zool. Soc. Lond., **5**, p. 10, Oct. 3, 1837—no locality (type in British Museum examined); idem, in Darwin, Zool. Beagle, **3**, Birds, p. 27, 1839—Santa Cruz, Patagonia; Philippi, Anal. Univ. Chile, **31**, p. 243, 1868—"southern provinces of Chile"; Reed, l.c., **93**, p. 205, 1896—Chile; Housse, Rev. Chil. Hist. Nat., **29**, p. 142, 1925—San Bernardo, Santiago, Chile; Philippi B., Bol. Mus. Nac. Hist. Nat., Santiago, **21**, p. 75, 1943 (specimens listed).

Buteo ater Philippi, Anal. Univ. Chile, **103**, pp. 664, 667, 1899—Chile (type in National Museum, Santiago, Chile); idem, Arch. Naturg., **65**, (1), p. 168, 1899; idem, Anal. Mus. Nac. Chile, **15**, p. 9, pl. 5, 1902—Valdivia;

***Buteo galapagoensis** (Gould). GALAPAGOS HAWK.

Polyborus galapagoensis Gould, Proc. Zool. Soc. Lond., **5**, p. 9, Oct. 3, 1837—Galapagos Islands (type now in the British Museum).

Craxirex galapagoensis Gould, in Darwin, Zool. Beagle, **3**, Birds, p. 23, pl. 2, 1839—Galapagos Islands (plumages; habits); Sclater and Salvin, Proc. Zool. Soc. Lond., 1870, p. 323—Indefatigable and Abingdon Islands.

Buteo galapagensis Sundevall, Proc. Zool. Soc. Lond., 1871, pp. 125, 127—Galapagos Islands; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 170, 1874 (monog.); Salvin, Trans. Zool. Soc. Lond., **9**, p. 495, 1876—Indefatigable and Abingdon Islands (crit.); Gurney, List Diurn. Bds. Prey, p. 143, 1884 (crit.); Gifford, Proc. Calif. Acad. Sci., (4), **2**, p. 190, 1919—Galapagos Islands (nesting habits; food); Swann, Syn. List Accip., p. 41, 1919 (chars.); idem, Syn. Accip., p. 68, 1922 (chars.).

Buteo (Craxirex) galapagoensis Ridgway, Proc. Acad. Nat. Sci. Phila., 1875, p. 93—Galapagos Islands (monog.).

Buteo galapagoensis Ridgway, Proc. U. S. Nat. Mus., **12**, p. 113, 1890—Indefatigable and Abingdon Islands (crit.); idem, l.c., **19**, p. 587, 1897—Galapagos Islands (monog.); Rothschild and Hartert, Nov. Zool., **6**, p. 174, 1899—Galapagos Islands (crit.; egg); iidem, l.c., **9**, p. 404, 1902—Narborough, Indefatigable and Seymour Islands (crit.); Snodgrass and Heller, Proc. Wash. Acad. Sci., **5**, p. 264, 1904—Albemarle Island (habits; nest; eggs); Swann, Monog. Bds. Prey, **1**, p. 351, 1926 (monog.); Swarth, Occ. Pap., Calif. Acad. Sci., **18**, p. 46, 1931—Bindloe, Abingdon, James, Jervis, Duncan, Albemarle, Narborough, Indefatigable, Daphne, Seymour, Barrington, Chatham, Hood, and Gardner-near-Hood Islands (crit.; meas.); Peters, Bds. World, **1**, p. 232, 1931 (range).

Range.—Galapagos Archipelago (recorded from the islands of Bindloe, Abingdon, James, Jervis, Duncan, Albemarle, Narborough, Indefatigable, Daphne, Seymour, Barrington, Chatham, Hood, and Gardner-near-Hood).

Field Museum Collection.—5: Galapagos Islands (Togos Cove, Albemarle Island, 1; Albemarle Island, 1; Barrington, 1; Abingdon Island, 1; Bindloe Island, 1).

Philippi B., El Hornero, **8**, p. 186, 1942 (type from Valdivia, said to be dark phase of *B. j. ventralis*).

Buteo macronychus Philippi, Anal. Univ. Chile, **103**, pp. 664, 667, 1899—Chile (type in National Museum, Santiago, Chile); idem, Arch. Naturg., **65**, (1), p. 168, 1899—Valdivia; idem, Anal. Mus. Nac. Chile, **15**, p. 8, pl. 4, 1902—Valdivia (juvenile plumage); Philippi B., El Hornero, **8**, p. 185, 1942 (type from Valdivia said to be the light phase of *B. j. ventralis*).

Asturina(?) *picta* Philippi, Anal. Mus. Nac. Chile, **15**, sect. 1, Zool., p. 17, pl. 9, 1902—Valdivia; Philippi B., El Hornero, **8**, p. 182, fig. 1, 1942 (=immature *Buteo ventralis* Gould).

Buteo borealis ventralis Swann, Syn. Accip., p. 80, 1922—Patagonia and southern Chile (chars.); idem, Monog. Bds. Prey, **1**, p. 397, 1928 (monog.).

Buteo jamaicensis borealis Philippi B., Rev. Chil. Hist. Nat., **44**, p. 142, 1940—Chile (visitor; tax. note); Housse, El Hornero, **8**, p. 46, 1941—Malleco, Chile (nesting).

***Buteo lineatus elegans** Cassin. RED-BELLIED HAWK.

Buteo elegans Cassin, Proc. Acad. Nat. Sci. Phila., 7, No. 7, Feb., 1855, p. 281, pub. May 22, 1855—California=Sacramento, Sacramento County[1] (type in collection of the Academy of Natural Sciences of Philadelphia; cf. Stone, Proc. Acad. Nat. Sci. Phila., 1899, p. 29, and Grinnell, Univ. Calif. Pub. Zool., 38, p. 266, 1932).

(*Buteo lineatus*) var. *elegans* Ridgway, in Baird, Brewer, and Ridgway, Hist. N. Amer. Bds., 3, p. 277, 1874 (monog.).

Buteo lineatus (not *Falco lineatus* Gmelin) Sharpe, Cat. Bds. Brit. Mus., 1, p. 191, 1874—part, California; Salvin and Godman, Biol. Centr.-Amer., Aves, 3, p. 66, 1900—part, California.

Buteo lineatus elegans Swann, Syn. List Accip., p. 49, 1919 (range); idem, Syn. Accip., p. 81, 1922 (range); idem, Monog. Bds. Prey, 1, p. 400, 1928 (monog.); Grinnell, Univ. Calif. Pub. Zool., 32, p. 109, 1928—northwestern Lower California; Peters, Bds. World, 1, p. 233, 1931 (range); Bent, Bull. U. S. Nat. Mus., 167, p. 203, 1937 (life hist.).

Range.—Austral zone of Oregon and California, chiefly in the San Joaquin and Sacramento valleys and in the San Diego district from Marin and Shasta counties south to northwestern Lower California.

Field Museum Collection.—6: California (Los Angeles County, 2; Pala, San Diego County, 1; San Diego, 1; San Francisco, 1; Los Olivos, Santa Barbara County, 1).

***Buteo lineatus lineatus** (Gmelin). NORTHERN RED-SHOULDERED HAWK.

Falco lineatus Gmelin, Syst. Nat., 1, (1), p. 268, 1788—based on "Barred-breasted Buzzard" Latham, Gen. Syn. Bds., 1, (1), p. 56,[2] and "Red-Shouldered Falcon" Pennant, Arct. Zool., 2, p. 206, Long Island, New York (ex Pennant).

Falco hyemalis Gmelin, Syst. Nat., 1, (1), p. 274, 1788—based on "Winter Falcon" Pennant, Arct. Zool., 2, p. 209, New York (type in coll. of Mrs. Blackburne).

Buteo fuscus (not *Falco fuscus* Miller 1777) Vieillot, Hist. Nat. Ois. Amer. Sept., 1, p. 31, pl. 5, 1807—North America (type in coll. of P. L. Vieillot; descr. of young).

Falco Buteoides Nuttall, Man. Orn. U. S. and Canada, 1, p. 100, 1832—eastern North America.

Buteo lineatus var. *lineatus* Ridgway, in Baird, Brewer and Ridgway, Hist. N. Amer. Bds., 3, p. 275, 1874 (monog.; excl. of Florida).

[1] As shown by Grinnell (Univ. Calif. Pub. Zool., 38, p. 267, 1932).

[2] This specimen, formerly in the Leverian Museum, passed into the Vienna Museum (cf. Pelzeln, Ibis, 1873, p. 106).

Buteo lineatus Sharpe, Cat. Bds. Brit. Mus., **1**, p. 191, 1874—part, spec. a, c, Delaware; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 66, 1900—part, eastern North America.

Buteo lineatus lineatus Swann, Syn. List Accip., p. 49, 1919 (chars.; range); idem, Syn. Accip., p. 80, 1922 (range); idem, Monog. Bds. Prey, **1**, p. 399, 1928 (monog.); Peters, Bds. World, **1**, p. 233, 1931 (range); Bent, Bull. U. S. Nat. Mus., **167**, p. 180, 1937 (life hist.).

Range.—Breeds from Manitoba, southern Quebec, Nova Scotia and Prince Edward Island south to southern Kansas, northeastern Tennessee, and North Carolina; winters through the southern part of its breeding range south to the Gulf and South Atlantic states.

Field Museum Collection.—66: Arkansas (Amity, 1); Wisconsin (Beaver Dam, 1); Illinois (Lake County, 3; Cook County, 5; Pulaski County, 1); Indiana (Bluffton, 2); Maine (Lincoln, 1); Connecticut (East Hartford, 7; Black Hall, 1; Litchfield, 1; Warren, 1; Killingworth, 1; New Haven County, 29; Stamford, 7); New Jersey (Orange, 2); Georgia (Roswell, 3).

***Buteo lineatus texanus** Bishop.[1] TEXAS RED-SHOULDERED HAWK.

Buteo lineatus texanus Bishop, Auk, **29**, p. 232, April 5, 1912—Corpus Christi, Texas (type in coll. of L. B. Bishop, now in Field Museum); Swann, Syn. List Accip., p. 50, 1919—Texas and Mexico (chars.); idem, Syn. Accip., p. 81, 1922 (chars.; range); Griscom and Crosby, Auk, **42**, p. 535, 1925—Brownsville and Lometa, Texas; Swann, Monog. Bds. Prey, **1**, p. 402, 1928—Texas to Tamaulipas (monog.); Peters, Bds. World, **1**, p. 233, 1931 (range); Bent, Bull. U. S. Nat. Mus., **167**, p. 210, 1937 (life hist.).

Buteo lineatus (not *Falco lineatus* Gmelin) Sclater, Proc. Zool. Soc. Lond., **25**, p. 211, 1857—Orizaba, Vera Cruz, Mexico; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 66, 1900—part, Mexico (Orizaba, Mexico City, [?]Zacatecas).

Buteo elegans (not of Cassin) Sclater and Salvin, Proc. Zool. Soc. Lond., 1869, p. 364—City of Mexico.

Range.—Plains of southern Texas (San Antonio, Austin, Corpus Christi, Brownsville, Lometa, etc.) and adjoining parts of Tamaulipas, Mexico; casual to central Mexico (Valley of Mexico; Orizaba, Vera Cruz).

Field Museum Collection.—16: Texas (Corpus Christi, Nueces County, 16).

[1] *Buteo lineatus texanus* Bishop: Similar to the nominate race but differs by having the breast more spotted with buffy, with the dark pectoral shaft streaks more conspicuous, and the anterior upper parts more rufous. The characters of this form are not very pronounced in specimens from Brownsville and San Antonio, when compared to a series from Washington, D.C. A single adult from the Valley of Mexico appears to belong here.

***Buteo lineatus alleni** Ridgway.[1] SOUTHERN RED-SHOULDERED HAWK.

Buteo lineatus alleni Ridgway, Proc. U. S. Nat. Mus., 7, "1884," p. 514, pub. Feb. 25, 1885—Tampa, Florida (type in U. S. National Museum); Swann, Syn. List Accip., p. 49, 1919—South Carolina to Florida (chars.); idem, Syn. Accip., p. 81, 1922 (chars.); idem, Monog. Bds. Prey, 1, p. 401, 1928 (monog.); Peters, Bds. World, 1, p. 233, 1931 (range); Bent, Bull. U. S. Nat. Mus., 167, p. 199, 1937 (life hist.); Oberholser, Bds. Louisiana, p. 169, 1938—Louisiana.

Range.—Resident in the South Atlantic and Gulf states from South Carolina west to Oklahoma and south to eastern Texas, and Florida (except the southern tip).

Field Museum Collection.—33: Louisiana (Mansura, Avoyelles County, 1); Florida (Bradford County, 4; Brevard County, 1; Duval County, 1; Hillsborough County, 1; Lee County, 2; Nassau County, 7; Palm Beach County, 7; Pinellas County, 1; Putnam County, 4; Volusia County, 4).

***Buteo lineatus extimus** Bangs.[2] FLORIDA RED-SHOULDERED HAWK.

Buteo lineatus extimus Bangs, Proc. New Eng. Zool. Cl., 7, p. 35, January 16, 1920—Cape Florida, southern end of Key Biscayne (type in Museum of Comparative Zoology, Cambridge, Mass.); Peters, Bds. World, 1, p. 233, 1931 (range); Bent, Bull. U. S. Nat. Mus., 167, p. 208, 1937 (life hist.).

Range.—Extreme southern Florida in Monroe and Dade counties.

Field Museum Collection.—9: Florida (Dade County, 4; Key Largo, 4; Key West, 1).

***Buteo ridgwayi** (Cory). RIDGWAY'S HAWK.

Rupornis ridgwayi Cory, Quart. Journ. Bost. Zool. Soc., 2, No. 4, p. 46, Oct., 1883—"Santo Domingo" (type from Samana, Dominican Republic, in coll. of C. B. Cory, now in Field Museum, examined); idem, Auk, 1, p. 4, 1884—San Domingo (descr.); idem, Bds. Haiti and San Dom., p. 121, col. pls. (adult and young), 1884—Magua, Samana, and Almercen; idem, Bds. W. Ind., p. 196, 1889—"San Domingo" (descr.); Tristram,

[1] *Buteo lineatus alleni* Ridgway is distinguished from *B. l. lineatus* by smaller size, paler under parts, and decidedly ashy tone of the upper plumage.

[2] *Buteo lineatus extimus* Bangs: Similar to *B. l. alleni* in coloration but much smaller. Wing (male), 275; tail, 170.

This hawk replaces the foregoing race in the southern parts of Florida. Bent found it particularly common in Monroe County and traced it as far north as Lake Okeechobee. Though the "Florida Keys" were supposed to constitute part of its range, no Red-shouldered Hawk appears to breed there (cf. Bent, Bull. U. S. Nat. Mus., 167, p. 208, 1937).

Cat. Coll. Tristram, pp. 61, 271, 1889—Samana; Cory, Cat. W. Ind. Bds., p. 99, 1892—Haiti and San Domingo; Christy, Ibis, 1897, p. 335—Yuna River (sight record); Verrill, Proc. Acad. Nat. Sci. Phila., **61**, p. 357, 1909—Minanda; Peters, Bull. Mus. Comp. Zool., **61**, p. 401, 1917—Laguna Flaca; Swann, Syn. Accip., p. 94, 1922 (chars.; range); Bond, Proc. Acad. Nat. Sci. Phila., **80**, p. 493, 1928—Massif du Nord, Haiti; Swann, Monog. Bds. Prey, **1**, p. 444, 1930 (monog.); Wetmore and Swales, Bull. U. S. Nat. Mus., **155**, p. 114, 1931—Hispaniola (monog.).

Coryornis ridgwayi Danforth, Auk, **46**, p. 362, 1929—Santo Domingo City, Haina and Gouade Island.

Buteo ridgwayi Peters, Bds. World, **1**, p. 233, 1931 (range); Wetmore, Proc. U. S. Nat. Mus., **81**, art. 2, p. 14, 1932—Ile-a-Vache, Hispaniola; idem and Lincoln, l.c., **82**, art. 25, p. 21, 1933—Geffard (Haiti), Ile-a-Vache, and Beata Island, Hispaniola.

Range.—Island of Hispaniola, Greater Antilles.

Field Museum Collection.—4: Hispaniola, Dominican Republic (Samana, Samana, 3; Magua, Seibo, 1).

***Buteo swainsoni** Bonaparte. SWAINSON'S HAWK.

Buteo Swainsoni Bonaparte, Geog. Comp. List Bds. Europe and North America, p. 3, 1838—new name for *"Buteo vulgaris"* Audubon=*Falco buteo* Audubon, Bds. Amer., Folio ed., **1**, pl. 372, Columbia River[1]=Fort Vancouver, Washington (type evidently lost); Ridgway, in Baird, Brewer and Ridgway, Hist. N. Amer. Bds., **3**, p. 263, 1874 (monog.); Salvin, Ibis, 1875, pp. 372, 377—Mas Afuera, off Chile; Gurney, Ibis, 1876, p. 234 (crit.); Sclater and Salvin, Proc. Zool. Soc. Lond., 1879, p. 540—Antioquia, Colombia; Withington, Ibis, 1888, p. 469—Lomas de Zamora, Buenos Aires; Sclater and Hudson, Arg. Orn., **2**, p. 59, pl. 16, 1889—Lomas de Zamora and Conchitas, Buenos Aires; Holland, Ibis, 1890, p. 426—Espartillar, Buenos Aires; idem, Ibis, 1892, p. 203—same locality (winter visitor; January); Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 68, 1900—Mexico, Guatemala (Duenas), and Costa Rica (San José, Tucurriqui); Lillo, Anal. Mus. Nac. Buenos Aires, **8**, p. 204, 1902—Rio Sali, Tucumán; idem, Rev. Letr. Cienc. Soc., **3**, No. 13, p. 62, 1905—Rio Sali, Tucumán; Ihering, Cat. Faun. Braz., **1**, p. 89, 1907 (Rio Grande do Sul, Brazil) (range); Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 244, 1910—Tucumán and Buenos Aires; Carriker, Ann. Carnegie Mus., **6**, p. 457, 1910—Volcan de Irazu, Costa Rica (April); Grant, Ibis, 1911, p. 331—Luiconia and Los Yngleses, Ajo, Buenos Aires; Gibson, Ibis, 1919, p. 507—Buenos Aires records; Ambrosetti, El Hornero, **1**, p. 287, 1919—Buenos Aires (Moron, Barracas al Sud, Muniz, Quilmes, Platenos, San Pedro) and Cordoba; Swann, Syn. List Accip., p. 42, 1919 (range); idem, Syn. Accip., p. 70, 1922 (range); Lönnberg and Rendahl, Ark. Zool., **14**, No. 25, p. 230, 1922—Zambiza, Ecuador (Jan. 15); Giacomelli, El Hornero, **3**, p. 77, 1923—Chacre de la Merced, La Rioja; Marelli, Mem. Min. Obr. Publ. for 1922–23, p. 630, 1924—Buenos Aires Province; (?)Sztolcman,

[1] Cf. Audubon, Orn. Biog., **4**, p. 508, 1838.

Ann. Zool. Mus. Pol. Hist. Nat., **5**, p. 123, 1926—Barre do Rio Bom, Paraná, Brazil (Dec. 22); Wetmore, Bull. U. S. Nat. Mus., **133**, p. 111, 1926—Sierra San Xavier, above Tafi Viejo, Tucumán (April 17); Swann, Monog. Bds. Prey, **1**, p. 361, 1926 (monog.); Peters, Bds. World, **1**, p. 233, 1931 (range); Zotta, El Hornero, **4**, p. 422, 1931—Argentina (food); Griscom, Bull. Mus. Comp. Zool., **64**, p. 154, 1932—Guatemala; Laubmann, Verh. Orn. Ges. Bay., **20**, p. 294, 1934—Est. La Geraldina, Santa Fe (April 20); Griscom, Bull. Mus. Comp. Zool., **78**, p. 299, 1935—Panama (transient); Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 430, 1936 (winter range in Argentina); Bent, Bull. U. S. Nat. Mus., **167**, p. 222, 1937 (life hist.); (?)Pinto, Rev. Mus. Paul., **22**, p. 70, 1938—Primeira Cruz, Maranhão (July); Dickey and van Rossem, Field Mus. Nat. Hist., Zool. Ser., **23**, p. 116, 1938—El Salvador (spring and fall transient); Pittman, Blue-Jay, Yorkton, Saskatchewan, **2**, p. 27, 1944 (habits); van Rossem, Occ. Pap. Mus. Zool. Louisiana State Univ., **21**, p. 57, 1945—Sonora (distr.); Borrero, Caldasia, **3**, (14), p. 411, 1945—Sabana de Bogotá, Colombia.

Buteo montanus Nuttall, Man. Orn. U. S. and Canada, 2nd ed., **1**, p. 112, 1840—eastern North America (no type extant).

Buteo bairdii (Hoy MS.) Cassin, Proc. Acad. Nat. Sci. Phila., **6**, p. 451, Dec., 1853—State of Wisconsin (descr. of young; type in the Academy of Natural Sciences of Philadelphia; cf. Stone, Proc. Acad. Nat. Sci. Phila., 1899, p. 29).

Buteo insignatus Cassin, Ill. Bds. Calif., Texas, etc., p. 102, pl. 31, 1854—Canada (descr. of melanistic plumage; type in collection of Museum of Natural History Society of Montreal); Bryant, Proc. Bost. Soc. N. H., **10**, p. 90, 1865 (crit. note on type).

Buteo oxypterus Cassin, Proc. Acad. Nat. Sci. Phila., **7**, p. 282, Feb., 1855—Fort Webster, New Mexico (descr. of young; type in the Academy of Natural Sciences of Philadelphia; cf. Stone, Proc. Acad. Nat. Sci. Phila., 1899, p. 29); Baird, Cassin and Lawrence, Bds. N. Amer., p. 30, pl. 15, fig. 2, 1860—Fort Fillmore, New Mexico.

Buteo fuliginosus Sclater, Proc. Zool. Soc. Lond., **26**, p. 356, Nov. 9, 1858—State of Tamaulipas, Mexico (type in Norwich Museum; descr. of melanistic plumage); idem, Trans. Zool. Soc. Lond., **4**, p. 267, pl. 62, 1858—Tamaulipas (fig. of type); Baird, Cassin and Lawrence, Bds. N. Amer., pl. 15, fig. 1; Gurney, Ibis, 1876, p. 235 (crit.).

(?)*Buteo gutturalis* Wied, Journ. Orn., **6**, p. 17, 1858—prairies of the upper Missouri River (type destroyed by fire).

Buteo albonotatus (not of Kaup) (?)Lawrence, Ann. Lyc. Nat. Hist. N. Y., **9**, p. 133, 1868—San José, Costa Rica.

Buteo albicaudatus (not of Vieillot) Sclater and Salvin, Proc. Zool. Soc. Lond., 1869, p. 634—Conchitas, Buenos Aires.

Buteo pterocles (not *Falco pterocles* Temminck) Lee, Ibis, 1873, p. 136—Rio Gato, Entre Rios (spec. examined).

Buteo obsoletus (not *Falco obsoletus* Gmelin) Sharpe, Cat. Bds. Brit. Mus., **1**, p. 184, 1874 (monog.).

Buteo (Craxirex) Swainsoni Ridgway, Proc. Acad. Nat. Sci. Phila., 1875, p. 100 (monog.; plumage).

Range.—Breeds from western Alaska, northwestern Mackenzie and Manitoba south to southern California and southeastern Arizona; in migration through Central America and western South America (scattered records from Colombia and Ecuador) to its winter range in Argentina (south occasionally to the Rio Negro[1] and (?)Chile[2] (occasional on Mas Afuera, Juan Fernandez Islands).[3]

Field Museum Collection.—111: British Columbia (Okanagan, 1); Alberta (Rosebud, 6; Many Islands Lake, 1); Saskatchewan (Maple Creek, 6; Cloverley, 1); Manitoba (Winnipeg, 1); California (San Bernardino County, 2; Los Angeles County, 3); Arizona (Cochise County, 3; Santa Cruz County, 1); Idaho (Payette, 3); Colorado (Routt County, 2; El Paso County, 1; New Castle, 4); Texas (Brewster County, 1; Aransas County, 1; Corpus Christi, 2); North Dakota (Eddy County, 1; Grippe County, 3; Nelson County, 11; Pierce County, 1; Ramsey County, 4; Rolette County, 4; Towner County, 39); Minnesota (Marshall County, 1); Iowa (Jackson County, 1); Kansas (Comanche County, 1; Oberlin, 2); Florida (Key West, 1); Mexico (Pesqueira, Sonora, 1; Tampico, Tamaulipas, 1); Costa Rica (Jimenez, Limón, 1).

***Buteo lagopus s.-johannis** (Gmelin). AMERICAN ROUGH-LEGGED HAWK.

Falco S. Johannis Gmelin, Syst. Nat., **1**, (1), p. 273, 1788—based on "St. John's Falcon" Pennant, Arct. Zool., **2**, p. 200, "in fretu Hudson's et nova terra"=Newfoundland.

Falco niger Wilson, Amer. Orn., **6**, p. vi, 1812—new name for "Black Hawk" Wilson, l.c., p. 82, pl. 53, fig. 1, North America (melanistic variety).

Buteo ater Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **4**, p. 482, 1816—based on "Black Hawk" Wilson, Amer. Orn., **6**, p. 82, pl. 53, fig. 1.

Archibuteo sancti johannis Sharpe, Cat. Bds. Brit. Mus., **1**, p. 197, 1874 (monog.).

[1] Although the locality "Patagonia" attached to two or three specimens in the British Museum on a dealer's authority is altogether untrustworthy, Swainson's Hawk does occasionally extend its winter migration so far south, as is proved by a juvenile male, obtained on the Rio Negro in May, 1871, in the same collection.

[2] We have not seen a single Chilean specimen of Swainson's Hawk. If it occurs at all in Chile, as has been claimed by Albert, it is probably but an occasional visitor. The majority spend the winter in Argentina, where these birds, according to local observers, at times appear in enormous flocks.

[3] In addition to large series from North America we have examined specimens from the following localities: Colombia: Antioquia, 1.—Bolivia: Esperanza, 1 (May).—Argentina: Los Yngleses, Ajo, Buenos Aires, 5; Espartillar, Buenos Aires, 2 (Feb.); Lomas de Zamora, Buenos Aires, 1 (Feb. 4); Rio Negro, Patagonia, 1.

Archibuteo lagopus sancti-johannis Bendire, Life Hist. N. Amer. Bds., **1**, p. 256, 1892 (biol.); Swann, Syn. List Accip., p. 53, 1919 (chars.; range); Swarth, Pac. Coast Avifauna, **22**, p. 24, 1934—Akutan Island (nesting).

Triorchis lagopus sancti-johannis Swann, Syn. Accip., p. 88, 1922 (chars.; range); idem, Monog. Bds. Prey, **1**, p. 424, 1928 (monog.).

Buteo lagopus s.-johannis Peters, Bds. World, **1**, p. 236, 1931 (range); Bent, Bull. U. S. Nat. Mus., **167**, p. 269, 1937 (life hist.); Porsild, Canad. Field Nat., **57**, p. 25, 1943—Mackenzie Delta (nesting); Bray, Auk, **60**, p. 515, 1943—Southampton Island (nesting); Soper, Auk, **63**, p. 223, 1946—Baffin Island (nesting).

Range.—Breeds in Arctic America from the Aleutian Islands and northwestern Alaska to Baffin Island, south to central British Columbia, southern Ungava, and Newfoundland; winters from southern British Columbia and the northern United States to California, New Mexico, Texas and North Carolina; accidental on St. George Island, Pribilof Islands.

Field Museum Collection.—50: Alaska (Bethel, 3; Iditirod, 5; Hot Springs, 2); Northwest Territory (Franklin Bay, 2); British Columbia (Victoria, 1); Alberta (Midnapore, 1); California (Bridgeport, Mono County, 1); Montana (Gallatin County, 1); Wyoming (Crook County, 1); North Dakota (Nelson County, 1; Towner County, 1); Kansas (Blue Rapids, 1; Burlington, 2); Minnesota (Roseau County, 2); Iowa (Audubon, 1; Burlington, 1); Wisconsin (Beaver Dam, 7); Illinois (Cook County, 1; Sycamore, 1; Plane, 1; Will County, 1); Indiana (Lake County, 3); Labrador (Mannak's Island, 1; Curlew Harbor, 5; Indian Harbor, 1); Maine (Lincoln, 1); Connecticut (Fairfield County, 1; New Haven, 1).

Buteo lagopus kamtschatkensis Dementjew. KAMCHATKA ROUGH-LEGGED HAWK.

Buteo lagopus kamtschatkensis Dementjew, Orn. Monatsber., **39**, p. 54, Mar. 4, 1931—mouth of Kichtschik River, Kamchatka (type in Moscow Museum).

(?)*Archibuteo lagopus sancti-johannis* Bailey, Condor, **28**, p. 123, 1926—Golovin Bay, Norton Sound (nesting).

(*Buteo lagopus*) *pallidus* (not *Archibuteo pallidus* Menzbier) Friedmann, Condor, **36**, p. 246, 1934—St. Michaels, Alaska (Sept. 16, 1879); idem, Auk, **55**, p. 291, 1938 (corr.); (?)Bailey, Auk, **59**, p. 305, 1942—Barrow and Norton Sound, Alaska (nesting).

Range.—Kamchatka; on migration and in winter on Bering Island and "Ursuriland." (?)Nesting in Alaska (Golovin Bay, Norton Sound; Barrow, St. Michael's).[1]

[1] Friedmann (Condor, **36**, p. 246, 1934; Auk, **55**, p. 291, 1938) and Bailey (Auk, **59**, p. 305, 1942) identify specimens from western Alaska as *B. l. kamtschat-*

***Buteo platypterus platypterus** (Vieillot).[1] BROAD-WINGED HAWK.

Falco pennsylvanicus (not of Wilson, Amer. Orn., **6**, p. 13, pl. 46, fig. 1, 1812) Wilson, Amer. Orn., **6**, p. 92, pl. 54, fig. 1, 1812—near the Schuylkill River, Pennsylvania (type in coll. of R. T. Peale, now in the Academy of Natural Sciences of Philadelphia; cf. Stone, Proc. Acad. Nat. Sci. Phila., 1899, p. 11).

Sparvius platypterus Vieillot, Tabl. Enc. Meth. Orn., livr. 93, p. 1273, 1823—based on Wilson, Amer. Orn., **6**, pl. 54, fig. 1.

Falco Wilsonii Bonaparte, Journ. Acad. Nat. Sci. Phila., **3**, p. 348, April, 1824—new name for *Falco pennsylvanicus* Wilson, Amer. Orn., **6**, p. 92, 1812.

Falco latissimus Bonaparte,[2] Journ. Acad. Nat. Sci. Phila., **3**, p. 348 (footnote), April, 1824—substitute name for *Falco pennsylvanicus* Wilson, p. 92; Ord, Wilson's Amer. Orn., 2nd ed., **6**, p. 92, 1824 (dated "1812," but see Faxen, Auk, **18**, p. 217, 1901).

Buteo pennsylvanicus Sclater, Proc. Zool. Soc. Lond., **25**, p. 261, 1857—Rio Javarri, Brazil; idem, l.c., **26**, p. 451, 1858—Gualaquiza, Ecuador; idem, l.c., **28**, p. 71, 1860—Pallatanga, Ecuador; Sclater and Salvin, l.c., 1873, p. 302—Chamicuros, Peru; Ridgway, in Baird, Brewer and Ridgway, Hist. N. Amer. Bds., **3**, p. 259, 1874 (monog.; excl. of Cuba); Sclater and Salvin, Proc. Zool. Soc. Lond., 1879, p. 540—Concordia, Envigada, and Santa Elena, Colombia; Salvin and Godman, Ibis, 1880, p. 177—Minca, Colombia; Taczanowski, Proc. Zool. Soc. Lond., 1882, p. 47—Huambo, Peru; Berlepsch and Taczanowski, l.c., 1883, p. 574—Chimbo, Ecuador; Taczanowski, Orn. Per., **1**, p. 113, 1884—Peru (Huambo, Chamicuros); idem and Berlepsch, Proc. Zool. Soc. Lond., 1885, p. 110—San Rafael, Ecuador; Berlepsch and Stolzmann, l.c., 1902, (2), p. 42—Maraynioc, Junín, Peru.

Buteo latissimus Sharpe, Cat. Bds. Brit. Mus., **1**, p. 193, 1874—Quebec, Ohio (Poland), Venezuela (Caracas), Peru (Chamicuros) and Panama; Hartert, Nov. Zool., **5**, p. 501, 1898—Paramba, Ecuador; Bangs, Proc. Biol. Soc. Wash., **12**, p. 132, 1898—Santa Marta, Colombia; Allen, Bull. Amer. Mus. N. H., **13**, p. 130, 1900—Bonda, Valparaiso and Santa Marta, Colombia; idem, Auk, **17**, p. 364, 1900—Santa Marta localities; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 69, 1900—Mexico to Panama; Goodfellow, Ibis, 1902, p. 221—Archidona and Guacamayo Range beyond Baeza, Ecuador; Ihering, Cat. Faun. Braz., **1**, p. 90, 1907—Rio Javarri, Brazil; Snethlage, Bol. Mus. Goeldi, **8**, p. 131, 1914 (listed).

kensis but admit that the examples studied are not typical. At best Alaskan birds would seem to be only intermediates.

[1] Doubtfully applicable to the Broad-Winged Hawk is *Falco fuscus* Miller (Var. Subj. Nat. Hist., Part 3, pl. 18, 1777—name not on plate, but on explanatory sheet to Part 3, with the caption "hab. in Greenlandis"; Shaw, in Miller, Cimelia Phys., p. 35, pl. 18, 1796—"native of North America"). The rather poor figure looks somewhat like *B. platypterus* but shows a red dark-banded tail. On Miller's plate is also based *Falco cinerascens* Bechstein, Latham's Allg. Ubers. Vogel, **4**, (1), p. 36, 1811.

[2] *Falco latissimus*, as published by Ord (in Guthrie, New Geog. Hist. and Commercial Grammar, 2nd Amer. ed., **2**, p. 315, 1815) is a nomen nudum.

Buteo (Craxirex) pennsylvanicus Ridgway, Proc. Acad. Nat. Sci. Phila., 1875, p. 116 (monog.; excl. of Cuba).

Buteo platypterus Faxon, Auk, 18, p. 218, 1901 (nomencl.); Bangs, Proc. New Eng. Zool. Cl., 3, p. 20, 1902—Boquete and Volcan de Chiriqui, Panama; Dearborn, Field Mus. Nat. Hist., Orn. Ser., 1, p. 82, 1907—Patulul, Guatemala; Ferry, l.c., p. 259, 1910—Coliblanco and Puerto Limon, Costa Rica; Chapman, Bull. Amer. Mus. N. H., 36, p. 243, 1917—Colombia (Juntas de Tamane, Dec. 19; Puerto Valdivia; La Frijolera; San Antonio, Jan. 14–Feb. 16; El Roble, Nov. 10; Salento, Oct. 31–Nov. 6; Santa Elena; Rio Toche, Oct. 23, 25; Fusugasuga, Apr. 13; Villavicencio, Mar. 9); Lönnberg and Rendahl, Ark. Zool., 14, (25), p. 40, 1922—Ecuador (Pichincha, Dec.; road to Mindo, Mar.; Gualea, Dec., Feb., July 10(!); Zambia, Nov.; Alaguinche, Mar.; Sincholagua, June 16[!]; Pomasqui, Aug. 1[!]; Rio Guaillabamba, Dec.).

Buteo platypterus platypterus Riley, Auk, 25, p. 269, 1908 (syn. excl. of Cuban and Puerto Rican records); Carriker, Ann. Carnegie Mus., 6, p. 458, 1910—Costa Rica (migratory visitor); Burns, Wilson Bull., 23, pp. 150, 162, 170, 1911 (plumages; syn.; life hist.; range, excl. of Cuba); Swann, Syn. List Accip., p. 50, 1919 (range in part); idem, Auk, 38, p. 360, 1921—Valle, Escorial, Culata, Conejos, and Nevados (Aug. 14–March 15), Merida, Venezuela; idem, Syn. Accip., p. 82, 1922 (range); Todd and Carriker, Ann. Carnegie Mus., 14, p. 150, 1922—La Concepción, Bonda, Cinto, Valparaiso, Mamatoco, Pueblo Viejo, Colombia (winter visitant, Oct. 12 –Apr. 10); Chapman, Bull. Amer. Mus. N. H., 55, p. 230, 1926—Ecuador (below Chambo; Naranjo, Dec.; Bucay, Dec.; below Oyacachi, Jan.–Feb.; above Baeza, Feb. 13; Rio Suno, Feb. 11); Kennard and Peters, Proc. Bost. Soc. N. H., 38, p. 449, 1928—Almirante, Panama (Feb. 26); Swann, Monog. Bds. Prey, 1, p. 403, 1928 (monog.); Zimmer, Field Mus. Nat. Hist., Zool. Ser., 17, p. 246, 1930—Rio Colorado, Peru; Naumburg, Bull. Amer. Mus. N. H., 60, p. 107, 1930—Urucum, Matto Grosso; Peters, Bds. World, 1, p. 236, 1931 (range); idem, Bull. Mus. Comp. Zool., 71, p. 311, 1931—Almirante Bay, Panama; Griscom, Bull. Amer. Mus. N. H., 64, p. 155, 1932—Secanquim and Barillos, Guatemala; Huber, Proc. Acad. Nat. Sci. Phila., 84, p. 212, 1932—Eden, Nicaragua; Griscom, Bull. Mus. Comp. Zool., 78, p. 299, 1935—Panama (visitor); Bent, Bull. U. S. Nat. Mus., 167, p. 236, 1937 (life hist.); Pinto, Rev. Mus. Paul., 23, p. 505, 1938—Sao Gabriel, Rio Negro, Brazil (Dec.); Dickey and van Rossem, Field Mus. Nat. Hist., Zool. Ser., 23, p. 111, 1938—El Salvador (migratory visitor); Philippi B., Bol. Mus. Nac. Hist. Nat. Santiago, 21, p. 74, 1943—Chile (3 records); Borrero, Caldasia, 3, (14), p. 411, 1945—Sabana de Bogotá, Colombia.

Buteo platypterus iowensis Bailey, Auk, 34, p. 73, Jan., 1917—Eagle Lake, Hancock County, Iowa (type in Coe College Museum, Cedar Rapids, Iowa); Oberholser, l.c., 35, p. 478, 1918 (crit.; melanism).

Range.—Breeds from Alberta, Ontario, southern Quebec and Cape Breton Island south to Texas, the Gulf states and Florida, west to the eastern edge of the Great Plains; winters from southern Illinois and New Jersey to Venezuela, Colombia, Ecuador, southern

Peru (Huambo; Chamicuros; Pozuzo, Huánuco; Rio Colorado, Chanchamayo, and Maraynioc, Junín; Santa Domingo; Carabaya, Puno) and Brazil (São Gabriel, Rio Negro; Urucum, Matto Grosso). Also recorded from Chile (3 records).

Field Museum Collection.—107: Alberta (Migualen Lake, Edmonton, 1); North Dakota (Griggs County, 1; Nelson County, 2; Ramsey County, 2; Towner County, 1); Minnesota (Parker's Prairie, Otter Tail County, 1); Arkansas (Winslow, 2; Amity, 1); Wisconsin (Beaver Dam, 4); Illinois (Lake Forest, 1; Chicago, 1; Joliet, 2; Henry, 2); Indiana (Bluffton, 1); Maine (Calais, 1; Oxford County, 1); New Hampshire (unspecified, 1); Connecticut (Warren, 3; Hadden, 1; Middlefield, 2; New Haven County, 10; Black Hall, 1; Fairfield County, 2); New Jersey (Patterson, 10); Georgia (Roswell, 3); Florida (Key West, 3); Mexico (Chilpancingo, Guerrero, 1); Guatemala (Patulul, Solola, 5; Bobos, Izabal, 1; Volcan Tajamulco, San Marcos, 2; Mount Cacaguatique, Morazan, 1); Nicaragua (Matagalpa, 1); Costa Rica (Coliblanco, Cartago, 1; Puerto Limón, Limón, 1; Limón, Limón, 2); Panama (Boquete, Chiriqui, 1; Port Obaldia, Darien, 2); Colombia, Cauca (El Tambo, Munchique, 11; San Antonio, 2; La Costa, 2); Venezuela (Valle, Merida, 2; Monte Sierra, Merida, 1); Ecuador (Paramba, 3; Huigra, Chimborazo, 1; Anagumba, Pichincha, 1; Piganta, Pichincha, 1; Llanganate, Tunguragua, 1; Quinchicoto, Tunguragua, 1); Peru (Tozuco, 1; Chanchamayo, Junín, 2).

***Buteo platypterus cubanensis** Burns.[1] CUBAN BROAD-WINGED HAWK.

Buteo platypterus cubanensis Burns, Wilson Bull., **23**, (=n.s., **18**), p. 148 (in text), Nov., 1911—Cuba (type not designated); Todd, Ann. Carnegie Mus., **10**, p. 193, 1916—Los Tres Hermanos Mountains, Isle of Pines (sight record); Peters, Bds. World, **1**, p. 236, 1931—part, Cuba and Isle of Pines; Bond, Not. Nat. Acad. Nat. Sci. Phila., **13**, p. 1, 1939 (probably a valid race).

[1] *Buteo platypterus cubanensis* Burns: Very similar to the nominate race, but somewhat smaller; edges to feathers of crown and nape more extensive as well as brighter rufous; the tibial feathers generally more strongly marked. Wing, 255, (females) 265–275; tail, 155, (female) 160–170.

No grayish "phase" so common in typical *platypterus* appears to occur in Cuba. Two adults from Cuba come pretty near to *B. p. antillarum*, having the rufous edging to crown and nape feathers just as conspicuous, but have the longitudinal stripes on foreneck and chest less rufous, more of a cinnamon brown to Prout's brown. Young birds are indistinguishable from *B. p. rivieri* of Dominica in coloration, but slightly larger.

Additional material examined.—Cuba: Bemba, 1; Banes Bay, 1; San Cristobal, 2.

Buteo latissimus (not *Falco latissimus* Bonaparte) Lembeye, Av. Cuba, p. 19, pl. 3, fig. 2, 1850—Cuba; Cory, Auk, **4**, p. 40, 1887—part, Cuba; idem, Bds. W. Ind., p. 198, 1889—part, Cuba; idem, Cat. W. Ind. Bds., p. 99, 1892—part, Cuba.

Buteo pennsylvanicus (not *Falco pennsylvanicus* Wilson) Gundlach, Journ. Orn., 2, "1854," Erinn., p. lxxxii, 1855—Cuba; Brewer, Proc. Bost. Soc. N. H., 7, p. 306, 1860—Cuba; Gundlach, in Poey, Repert. Hist. Nat. Cuba, **1**, p. 223, 1865—Cuba (resident); idem, Journ. Orn., **19**, p. 366, 1871—Cuba.

Buteo platypterus platypterus (not *Sparvius platypterus* Vieillot) Riley, Auk, **25**, p. 269, 1908—part, Cuba (crit.); Swann, Syn. Accip., p. 82, 1922—part, Cuba; Barbour, Mem. Nutt. Orn. Cl., **6**, p. 46, 1923—Cuba.

Range.—Island of Cuba (?and Isle of Pines), Greater Antilles.

Field Museum Collection.—2: Cuba (Los Palacios, 2).

Buteo platypterus brunnescens Danforth and Smyth.[1] PUERTO RICAN BROAD-WINGED HAWK.

Buteo platypterus brunnescens Danforth and Smyth, Journ. Agric. Univ. Puerto Rico, **19**, No. 4, "October," p. 485, pub. Dec., 1935—El Yunque Mountain, Puerto Rico (type in coll. of S. T. Danforth).

Buteo pennsylvanicus (not *Falco pennsylvanicus* Wilson) Gundlach, Journ. Orn., **22**, p. 310, 1874—Puerto Rico; idem, l.c., **26**, pp. 158, 163, 1878—Puerto Rico; idem, Anal. Soc. Esp. Hist. Nat., **7**, p. 160, 1878—Puerto Rico; Stahl, Ornis, **3**, p. 450, 1887—Puerto Rico (rare in the mountains).

Buteo latissimus (not *Falco latissimus* Bonaparte) Cory, Auk, **4**, p. 40, 1887—part, Puerto Rico; idem, Bds. W. Ind., p. 198, 1887—part, Puerto Rico; idem, Cat. W. Ind. Bds., p. 99, 1892—part, Puerto Rico.

Buteo platypterus platypterus (not *Sparvius platypterus* Vieillot) Riley, Auk, **25**, p. 269, 1908—part, Puerto Rico; Burns, Wilson Bull., **23**, p. 162, 1911—part, Puerto Rico; Wetmore, Bull. U. S. Dept. Agric., **326**, p. 32, 1916—Utuado, Puerto Rico; idem, Sci. Surv. Porto Rico and Virgin Islands, **9**, p. 322, 1927—Puerto Rico.

Buteo platypterus Peters, Auk, **47**, p. 563, 1930—El Yunque, Puerto Rico (seen).

Range.—Island of Puerto Rico, Greater Antilles.[2]

[1] *Buteo platypterus brunnescens* Danforth and Smyth is stated to be darker than any other known form of Broad-wing, being smaller than *platypterus*, larger than *insulicola* or *rivierei*. Wing, (adult female) 264.5; tail, 159 mm.

The unique type needs comparison with the Cuban form, a matter which the describer was unable to effectuate.

[2] It is quite possible that the single immature Broad-wing secured near Santiago, Dominican Republic, Island of Hispaniola (as recorded by Wetmore and Swales, Bull. U. S. Nat. Mus., **155**, p. 113, 1931) might be referable to *B. p. brunnescens*.

***Buteo platypterus insulicola** Riley.[1] ANTIGUAN BROAD-WINGED HAWK.

Buteo platypterus insulicola Riley, Auk, **25**, p. 273, July, 1908—Antigua (type in U. S. National Museum); Burns, Wilson Bull., **23**, pp. 159, 169, 196, 1911—Antigua (chars.; synon.); Swann, Syn. List Accip., p. 50, 1919—Antigua; idem, Monog. Bds. Prey, **1**, p. 405, 1928—Antigua; Peters, Bds. World, **1**, p. 237, 1931—Antigua; Danforth, Auk, **51**, p. 357, 1934—Antigua.

Buteo pennsylvanicus (not *Falco pennsylvanicus* Wilson) Lawrence, Proc. U. S. Nat. Mus., **1**, p. 236, 1878—Antigua.

Buteo latissimus (not *Falco latissimus* Bonaparte) Cory, Auk, **8**, p. 47, 1891—Antigua (crit.); idem, Cat. W. Ind. Bds., p. 99, 1892—part, Antigua.

Buteo platypterus (not *Sparvius platypterus* Vieillot) Riley, Smiths. Misc. Coll., **47**, p. 282, 1904—Antigua (crit.).

Range.—Island of Antigua, Lesser Antilles.

Field Museum Collection.—11: Lesser Antilles (Antigua, 11).

***Buteo platypterus rivierei** A. H. Verrill.[2] DOMINICAN BROAD-WINGED HAWK.

Buteo (latissimus) rivierei A. H. Verrill, Descriptions of three new species of birds from Dominica, B.W.I., unpaged pamphlet, no date=Oct. 24, 1905—Dominica (cotypes in coll. of L. B. Bishop now in Field Museum of Natural History; cf. Burns, Wilson Bull., n.s., **18**, p. 158, 1911).

Buteo pennsylvanicus (not *Falco pennsylvanicus* Wilson) Lawrence, Proc. U. S. Nat. Mus., **1**, p. 65, 1878—Dominica; Allen, Bull. Nutt. Orn. Cl., **5**, p. 169, 1880—Santa Lucia; Sclater, Proc. Zool. Soc. Lond., 1889, p. 326—Dominica; idem, l.c., p. 395—Santa Lucia.

Buteo latissimus (not *Falco latissimus* Bonaparte) Cory, Auk, **4**, p. 96, 1887—Martinique; idem, Cat. W. Ind. Bds., p. 99, 1892—part, Dominica,

[1] *Buteo platypterus insulicola* Riley: About the same size as the other Lesser Antillean races, but quite dissimilar in coloration, being much closer to typical *platypterus*, though the lighter brown dorsal surface and the much paler, dull rufescent tone of the brown markings underneath serve to distinguish it. Wing, 237, (female) 255; tail, 135, (female) 145.

Two additional adults from Antigua in the British Museum examined.

[2] *Buteo platypterus rivierei* A. H. Verrill is very doubtfully separable from *B. p. antillarum*. An adult from Santa Lucia is indistinguishable from the most rufous colored individual of *antillarum* as described below. Two others, an adult male from Dominica and another from Santa Lucia, however, are not nearly so rufous on chest and sides of head and more nearly resemble certain individuals of *platypterus* though they are smaller and have still more rufous suffusion on chest, sides of head and crown. Wing, 240–253, (female) 260; tail, 145–150, (female) 160–168.

Additional material examined.—Dominica, 2; Santa Lucia, 2.—C.E.H.

Eight *adults* from Dominica (the type series) are much darker and more rufous below than the specimens of *insulicola* and *antillarum* in the Museum's collection. —B.C.

Martinique and Santa Lucia; G. E. Verrill, Trans. Conn. Acad. Sci., **8**, p. 325, 1892—Bass-en-ville, Dominica.

Buteo rivieri A. H. Verrill, Addition(s) to the Avifauna of Dominica, unpaged pamphlet, no date=Oct. 24, 1905—Dominica.

Buteo platypterus rivierei Riley, Auk, **25**, p. 272, 1908—Dominica (crit.); Burns, Wilson Bull., **23**, pp. 158, 168, 196, 1911—Dominica (char.; synon.); Swann, Syn. List Accip., p. 50, 1919—Dominica (chars.); Peters, Bds. World, **1**, p. 237, 1931—Dominica to Santa Lucia; Danforth, Monog. Univ. Puerto Rico, Ser. B., No. 3, p. 23, 1935—Santa Lucia.

Buteo platypterus antillarum (not of Clark) Riley, Auk, **25**, p. 271, 1908—part, Martinique and Santa Lucia; Burns, Wilson Bull., **23**, pp. 157, 168, 196, 1911—part, Martinique and Santa Lucia; Swann, Syn. Accip., p. 82, 1922—part, Santa Lucia and Dominica; idem, Monog. Bds. Prey, **1**, p. 405, 1928—part, Santa Lucia and Dominica; Bond, Proc. Acad. Nat. Sci. Phila., **80**, p. 527, 1928—part, Santa Lucia.

Range.—Islands of Dominica, Martinique, and Santa Lucia, Lesser Antilles.

Field Museum Collection.—18: Lesser Antilles (Dominica, 16;[1] Martinique, 1; Santa Lucia, 1).

*Buteo platypterus antillarum Clark.[2] ANTILLEAN BROAD-WINGED HAWK.

Buteo antillarum Clark, Proc. Biol. Soc. Wash., **18**, p. 62, Feb. 21, 1905—Chateau Belair, St. Vincent (type in coll. of E. A. and O. Bangs, now in Museum of Comparative Zoology, Cambridge, Mass.; cf. Bangs, Bull. Mus. Comp. Zool., **70**, p. 189, 1930); idem, Proc. Bost. Soc. N. H., **32**, p. 241, 1905—St. Vincent.

Buteo pennsylvanicus (not *Falco pennsylvanicus* Wilson) Lawrence, Proc. U. S. Nat. Mus., **1**, p. 194, 1878—St. Vincent; idem, l.c., **1**, pp. 273, 278, 1879—Grenada and Grenadines; Lister, Ibis, 1880, p. 43—St. Vincent; Wells, Proc. U. S. Nat. Mus., **9**, p. 622, 1887—Grenada (nest and eggs descr.).

Buteo latissimus (not *Falco latissimus* Bonaparte) Cory, Ibis, 1886, p. 473—St. Vincent; Feilden, Ibis, 1889, p. 489—Barbados (extinct); Cory, Cat.

[1] A series of thirteen cotypes used by Verrill in describing this race is now in the Bishop Collection in Field Museum. A male bearing the Field Museum number 124175 (Bishop number 12006), taken on Dominica on October 14, 1904, may be considered the lectotype.

[2] *Buteo platypterus antillarum* Clark: Differs from *B. p. platypterus* by decidedly smaller size and more rufous general coloration; brighter rufous edges to the feathers of the dorsal plumage, especially about the hindneck and upper back; brighter markings underneath; deeper ochraceous-buff tibial feathers, more densely barred with brighter rufous. Wing, 245–250, (female) 265–275; tail, 145–160.

Some specimens are remarkable for their rufous coloring. The edges to the feathers of the pileum, upper back, scapulars and wing coverts are bright tawny; the sides of head and neck are even deeper, between tawny and russet; the markings on lower breast and belly are very nearly russet, etc. Such individuals look very different from *platypterus*, but other specimens are not nearly so extremely colored.

Additional material examined.—St. Vincent, 5; Grenada, 2.

W. Ind. Bds., p. 99, 1892—part, St. Vincent, Grenadines (Bequia, "Canonan," Carriacou), and Barbados; idem, Auk, **10**, p. 220, 1893—Tobago.

Buteo platypterus antillarum Riley, Auk, **25**, p. 271, 1908—part, St. Vincent, Grenadines, Tobago and Grenada; Burns, Wilson Bull., n.s., **18**, pp. 157, 168, 196, 1911—part, Barbados, St. Vincent, Grenadines (Bequia, Mustique, Cannuan, Carriacou), Tobago and Grenada (chars.; synon.); Swann, Syn. List Accip., p. 50, 1919—part, St. Vincent and Grenada (chars.); idem, Syn. Accip., p. 82, 1922—part, St. Vincent and Grenada; idem, Monog. Bds. Prey, **1**, p. 405, 1928—part, St. Vincent and Grenada; Bond, Proc. Acad. Nat. Sci. Phila., **80**, p. 527, 1928—part, St. Vincent; Peters, Bds. World, **1**, p. 237, 1931—St. Vincent, Grenadines, and Grenada.

Range.—Islands of St. Vincent, the larger Grenadines, Grenada and Tobago;[1] formerly also Barbados, Lesser Antilles.

Field Museum Collection.—12: Lesser Antilles (St. Vincent, 5; Grenada, 4; Tobago, 3).

***Buteo magnirostris griseocauda** (Ridgway). MEXICAN LARGE-BILLED HAWK.

[*Buteo* (*Rupornis*) *magnirostris*] var. *griseocauda* Ridgway, Proc. Bost. Soc. N. H., **16**, pp. 87, 88, Dec., 1873—"Mexico, from the Atlantic to the Pacific . . ." (cotypes, from Rio Seco and Tehuantepec, Oaxaca, in coll. of the Boston Society of Natural History, now in Museum of Comparative Zoology, Cambridge, Mass.; cf. Bangs, Bull. Mus. Comp. Zool., **70**, p. 190, 1930).

Asturina magnirostris (not *Falco magnirostris* Gmelin) Sclater, Proc. Zool. Soc. Lond., **24**, p. 285, 1856—near Córdoba, Vera Cruz; idem, l.c., **27**, p. 368, 1859—vicinity of Jalapa; idem, l.c., 1864, p. 178—vicinity of Mexico City.

Asturina ruficauda Sclater and Salvin, Proc. Zool. Soc. Lond., 1869, p. 133—part, Mexico (Córdoba, Jalapa, Mexico City); iidem, Exot. Orn., p. 175, 1869—part, southern Mexico; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 205, 1874—part, southern Mexico; Salvin, Proc. Zool. Soc. Lond., 1883, p. 426—Acapulco, Guerrero.

Rupornis magnirostris var. *griseocauda* Lawrence, Bull. U. S. Nat. Mus., **4**, p. 39, 1874—Chihuitan, Almoloya (near Barrio), and Santa Efigenia, Oaxaca.

[1] A single adult bird from Tobago I am unable to refer to any described race. Compared to *antillarum*, it is about the same size, but differs markedly in coloration. On hindneck and sides of neck there are just slight traces of cinnamomeous edgings while the foreneck and chest are much duller and more grayish (about light drab or wood brown). Wing, 260; tail, 160.

This form was recorded by Cory (Auk, **10**, p. 220, 1893) under the name *latissimus*. Specimens from Tobago were also discussed under the name *Buteo platypterus antillarum* by Riley (Auk, **25**, p. 272, 1908) and Burns (Wilson Bull., n.s., **18**, p. 197, 1911).—C.E.H.

The three specimens from Tobago in Field Museum resemble the St. Vincent birds.—B.C.

Asturina magnirostris var. *griseocauda* Sumichrast, La Naturaleza, **5**, p. 236, 1881—Tehuantepec, Oaxaca.

Rupornis magnirostris griseocauda Ferrari-Perez, Proc. U. S. Nat. Mus., **9**, p. 167, 1886—Jalapa, Vera Cruz; Richmond, l.c., **18**, p. 628, 1896—Alta Mira, Tamaulipas; Bangs and Peters, Bull. Mus. Comp. Zool., **67**, p. 473, 1927—Presidio, Vera Cruz; Peters and Griscom, Proc. New Eng. Zool. Cl., **11**, p. 44, 1929—southern Mexico (crit.).

Rupornis ruficauda Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 76, 1900—part, Tamaulipas (Aldama, Tampico, Alta Mira), Colima (Tacolapa), Vera Cruz (Colipa, Vega del Casadero, Alvarado, Coatepec, Huatusco, Hacienda Tortugas, Plan del Rio, Rio Rancho Nuevo, Santana, San Lorenzo, Córdoba, Jalapa), Mexico (City of Mexico), Guerrero (Acapulco), Oaxaca (Chihuitan, Almoloya, Santa Efigenia), Chiapas (Tuxtla, Tonalá), and Tabasco (Teapa).

Rupornis griseicauda Phillips, Auk, **28**, p. 73, 1911—Alta Mira, Caballeros, Rio Cruz, and Santa Leonor, Tamaulipas.

Rupornis magnirostris griseicauda Swann, Syn. List Accip., p. 55, 1919—part, Mexico; idem, Syn. Accip., p. 92, 1922—part, Mexico; idem, Monog. Bds. Prey, **1**, p. 440, 1930—part, Mexico.

Buteo magnirostris griseocauda Peters, Bds. World, **1**, p. 236, 1931 (range); Griscom, Bull. Mus. Comp. Zool., **75**, p. 373, 1934—Coyucá, Guerrero; Sutton and Pettingill, Occ. Pap. Mus. Zool. Louisiana State Univ., **16**, p. 276, 1943—Linares, Nuevo Leon.

Buteo magnirostris xantusi van Rossem, Ann. Mag. Nat. Hist., (11), **4**, p. 440, Oct., 1939—Rio Armenia, Colima, Mexico (type, an immature, in U. S. National Museum).

Buteo magnirostris petersi Brodkorb, Occ. Pap. Mus. Zool., Univ. Mich., **425**, p. 2, Nov. 30, 1940—above Arriaga, Chiapas, Mexico, altitude 100 meters (type in Museum of Zoology, University of Michigan).

Range.—Eastern and southern Mexico from Nuevo Leon, Tamaulipas and Colima south to Oaxaca, Tabasco, and Chiapas.[1]

Field Museum Collection.—8: Mexico (Tampico, Tamaulipas, 5; Altamira, Tamaulipas, 1; La Mesa, Tamaulipas, 1; State of Vera Cruz, 1).

[1] Birds from Tabasco (Teapa) and Chiapas (Tonalá, Tuxtla) are exactly like topotypical Oaxaca specimens. All of the adult specimens of this form indeed have the light-colored tail-bands grayish brown without trace of rufous, though the three outer tail feathers always show, at the base of the outer webs, a varying amount of bright coloring that ranges in tone from buff to tawny. One male from Jalapa has so much tawny that it cannot be distinguished from certain Guatemalan specimens (e.g. Savannah Grande), while one from Plan del Rio with even more rufous on the lateral rectrices is matched by one from Escuintla.

Additional material examined.—Guerrero: Acapulco, 1.—Colima: Tacolapa, 1.—Tamaulipas: Tampico, 6.—Vera Cruz: Jalapa, 1; Plan del Rio, Jalapa, 2; Colipa, 1; Vega del Casadero, 1; Alvarado, 1.—Oaxaca: Tehuantepec, 5.—Tabasco: Teapa, 2.—Chiapas: Tonalá, 3; Tuxtla, 1.

***Buteo magnirostris conspectus** (Peters).[1] YUCATAN LARGE-BILLED HAWK.

Rupornis magnirostris conspecta Peters, Auk, **30**, No. 3, p. 370, July 3, 1913—San Ignacio, Yucatan (type in Museum of Comparative Zoology, Cambridge, Mass.); Swann, Syn. List Accip., p. 56, 1919—Yucatan (chars.); idem, Syn. Accip., p. 92, 1922—Yucatan Peninsula (except southern Campeche) and British Honduras (chars.); Griscom, Amer. Mus. Nov., **235**, p. 12, 1926—eastern Quintana Roo; Peters and Griscom, Proc. New Eng. Zool. Cl., **11**, p. 45, 1929 (crit.); Swann, Monog. Bds. Prey, **1**, p. 440, 1930 (monog.).

Asturina magnirostris (not *Falco magnirostris* Gmelin) Lawrence, Ann. Lyc. Nat. Hist. N. Y., **9**, p. 207, 1869—Mérida, Yucatan.

Asturina ruficauda (not of Sclater and Salvin) Boucard, Proc. Zool. Soc. Lond., 1883, p. 456—Yucatan; Salvin, Ibis, 1889, p. 374—part, Meco Island; Stone, Proc. Acad. Nat. Sci. Phila., 1890, p. 204—south of Izamal, Yucatan.

Rupornis ruficauda Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 76, 1900—part, northern Campeche, Yucatan (Peto, Chablé, Tabi, Mérida, Izamal, Meco Island), and British Honduras (Orange Walk).

Rupornis ruficauda griseicauda (not of Ridgway) Cole, Bull. Mus. Comp. Zool., **50**, p. 121, 1906—San Ignacio, Yucatan.

Buteo magnirostris conspectus Peters, Bds. World, **1**, p. 237, 1931 (range); Traylor, Field Mus. Nat. Hist., Zool. Ser., **24**, p. 203, 1941—Chichen Itza, Yucatan.

Range.—Yucatan Peninsula (including Meco Island but not southern Campeche) and northern British Honduras.

Field Museum Collection.—14: Mexico, Yucatan (San Felipe, 1; Rio Lagartos, 1; Chable, 1; Chichen Itza, 7; unspecified, 2); British Honduras (22 mile station, Stann Creek Railroad, 1; Middlesex, 1).

***Buteo magnirostris gracilis** (Ridgway).[2] COZUMEL LARGE-BILLED HAWK.

Rupornis gracilis Ridgway, Proc. U. S. Nat. Mus., **8**, p. 94, May 20, 1885—Cozumel Island (type in U. S. National Museum).

[1] *Buteo magnirostris conspectus* (Peters): Very close to, and agreeing in coloration of tail with *B. m. griseocauda*, but distinguished by slightly smaller size and decidedly paler, more grayish upper parts. The breast, as a rule, is paler, more grayish, and less variegated with buffy, while the barring on the belly is of a lighter rufescent. The single adult from Meco Island is quite typical, being very clear mouse gray above, like a male from Chablé, and even paler on the chest. An adult female from northern Yucatan and an adult male from Orange Walk, Belize, closely approach *griseocauda* in hair brown coloring of upper parts, foreneck, and chest. Wing, 215–227 mm.

Additional material examined.—Yucatan: Tabi, 1; Chablé, 1; Peto, 2; northern Yucatan, 3; Meco Island, 2.—British Honduras: Orange Walk, Belize, 1.

[2] *Buteo magnirostris gracilis* (Ridgway): Nearest to *B. m. conspectus*, but upper parts darker and browner, and distinguished from both *conspectus* and *griseocauda* by lacking the solid grayish brown prepectoral area, the feathers of this region

Rupornis magnirostris gracilis Ridgway, Proc. U. S. Nat. Mus., 8, p. 578, Oct. 19, 1885—Cozumel (full descr.); Swann, Syn. List Accip., p. 56, 1919—Cozumel (chars.); idem, Syn. Accip., p. 93, 1922—Cozumel (chars.); Griscom, Amer. Mus. Nov., **236**, p. 8, 1926—Cozumel; Peters and Griscom, Proc. New Eng. Zool. Cl., **11**, p. 45, 1929 (crit.); Swann, Monog. Bds. Prey, **1**, p. 440, 1930—Cozumel (monog.).

Asturina ruficauda (not of Sclater and Salvin) Salvin, Ibis, 1885, p. 193—Cozumel; idem, l.c., 1889, p. 374—part, Cozumel and Holbox Islands.

Rupornis ruficauda Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 76, 1900—part, Cozumel and Holbox Islands.

Buteo magnirostris gracilis Peters, Bds. World, **1**, p. 237, 1931 (range).

Range.—Cozumel and Holbox Islands, off Yucatan.

Field Museum Collection.—1: Mexico (Cozumel Island off Yucatan, 1).

Buteo magnirostris sinus-honduri Bond.[1] BONACCA LARGE-BILLED HAWK.

Buteo magnirostris sinus-honduri Bond, Proc. Acad. Nat. Sci. Phila., 88, p. 355, Aug. 14, 1936—Bonacca Island, Spanish Honduras (type in the Academy of Natural Sciences of Philadelphia).

Asturina ruficauda (not of Sclater and Salvin) Salvin, Ibis, 1889, p. 374—part, islands of Bonacca and Ruatan.

Rupornis ruficauda Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 76, 1900—part, islands of Bonacca and Ruatan.

Range.—Islands of Bonacca and Ruatan, off Honduras.

Field Museum Collection.—1: Honduras (Ruatan, Bay Islands, 1).

having a broad central stripe of dark brown broadly margined with white or buff on either side. This pattern produces a streaked appearance recalling the juvenile plumage of the allied races. The tail-bands in this race are constantly pure grayish brown; only the outer web of the lateral rectrices is buff to tawny at the extreme base. A single adult collected by Gaumer in December 1885, on Holbox Island, with a wing of 218 mm., cannot be distinguished from Cozumel birds, for it is equally dark brown above, and the breast is streaked with dusky and buff. Wing, 200–222, one female, 230 mm.

Fifteen specimens from Cozumel and one from Holbox examined.

[1] *Buteo magnirostris sinus-honduri* Bond: Similar to *B. m. gracilis*, but buffy base to lateral rectrices more restricted, sometimes even altogether wanting; upper parts much darker brown, very nearly bister; the breast again predominantly dark brown (deep hair brown), forming a conspicuous solid dusky area relieved by comparatively few buffy markings; barring of breast broader and darker on a deeper buff ground; tibial feathers very dark, approaching ochraceous-tawny, and strongly barred. Only one specimen resembles *gracilis* in streaked prepectoral area, though the central stripes are very much darker brown. Ruatan birds are exactly like those from Bonacca. Wing measurements: Ruatan: 218, 220, 220, 228, 235. Bonacca: 220, 230, 240.

Five adults from Ruatan and three from Bonacca in the British Museum examined.

***Buteo magnirostris direptor** (Peters and Griscom).[1] GUATEMALAN LARGE-BILLED HAWK.

Rupornis magnirostris direptor Peters and Griscom, Proc. New Eng. Zool. Cl., **11**, p. 46, Aug. 30, 1929—Finca El Cipres, near Mazatenango, Guatemala (type in the American Museum of Natural History, New York); Griscom, Bull. Amer. Mus. N. H., **64**, p. 156, 1932—Guatemala (Puebla; Hacienda Carolina; Hacienda California; Finca El Cipres; Virginia Plantation, near Puerto Barrios; Ocos).

Asturina magnirostris (not *Falco magnirostris* Gmelin) Sclater and Salvin, Ibis, 1859, p. 217—Guatemala.

Asturina ruficauda Sclater and Salvin, Proc. Zool. Soc. Lond., 1869, p. 133—part, Guatemala; iidem, Exot. Orn., p. 175, pl. 88, left fig., 1869—part, Guatemala (Zacapa, Pacific coast region, Rio Polochic, Choctum, Petén).

Rupornis ruficauda Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 76, 1900—Guatemala (Santa Toribio, Petén; Teleman, Polochic Valley; Chimalapa, Motagua; Savanna Grande; Escuintla road from San Antonio to Paramos; Sierra de las Minas) and Salvador (La Libertad).

Rupornis ruficauda griseocauda (not of Ridgway) Dearborn, Field Mus. Nat. Hist., Orn. Ser., **1**, p. 82, 1907—Los Amates and San José, Guatemala.

Rupornis magnirostris griseicauda Swann, Syn. List Accip., p. 55, 1919—part, Guatemala; idem, Syn. Accip., p. 92, 1922—part, Guatemala; idem, Monog. Bds. Prey, **1**, p. 440, 1930—part, Guatemala.

Buteo magnirostris direptor Peters, Bds. World, **1**, p. 237, 1931—Guatemala to Salvador and southwestern British Honduras; Van Tyne, Misc. Publ., Mus. Zool. Univ. Mich., **27**, p. 16, 1935—Chuntuquí, Pacamón, and Flores, Petén, Guatemala; Carriker and de Schauensee, Proc. Acad. Nat. Sci. Phila., **87**, p. 415, 1935—Quirigua, Guatemala; Traylor, Field Mus. Nat. Hist., Zool. Ser., **24**, p. 203, 1941—Pacaitun, Campeche, Mexico.

Range.—Southern Campeche[2] south through Guatemala to El Salvador and east to southwestern British Honduras.

[1] *Buteo magnirostris direptor* (Peters and Griscom) is just separable from *griseocauda* by having the base of the outer web of the three lateral rectrices more extensively as well as more deeply tawny, and at least traces of tawny in the gray transverse bands of the other rectrices. The most rufous "extreme" is a Teleman bird with the rufous predominating over the gray in the light interspaces, while the most grayish tail is possessed by an adult male from Savanna Grande, which has no trace of reddish whatever in the gray bands, and no more buffy-ochraceous on the lateral rectrices than certain individuals from Jalapa. The other specimens are intermediate between these stages. Two adults from Salvador agree well with the Guatemalan average. The Teleman bird has the bars on the abdomen much brighter rufous than the other Guatemalan skins, but is closely matched by one from Alvarado, Vera Cruz.

Additional adults examined.—Guatemala: Santo Toribio, Petén, 1; Chimalapa, 1; Teleman, Polochic River, 1; Savanna Grande, 2; Escuintla, 1; Sierra de las Minas, 1.—El Salvador: La Libertad, 2.—C.E.H.

[2] Six specimens from Campeche appear to agree more closely with Guatemalan birds than with those from Yucatan or northern Mexico. Their upper parts are darker than examples of *conspectus* and the lateral rectrices are more rufous than in *griseocauda*.—B.C.

Field Museum Collection.—24: Mexico (Pacaitun, Campeche, 6); Guatemala (San José, Escuintla, 1; Concepción del Mar, Escuintla, 1; Tiquisate, Escuintla, 1; Los Amates, Izabal, 3; Bobos, Izabal, 5); El Salvador (Laguna Olomega, San Miguel, 3; Hacienda Zapotitan, La Libertad, 2; San Sebastian, La Paz, 2).

***Buteo magnirostris argutus** (Peters and Griscom).[1] NICARAGUAN LARGE-BILLED HAWK.

Rupornis magnirostris arguta Peters and Griscom, Proc. New Eng. Zool. Cl., **11**, p. 46, Aug. 30, 1929—Almirante, northwestern Panama (type in Museum of Comparative Zoology, Cambridge, Mass.); Peters, Bull. Mus. Comp. Zool., **69**, p. 417, 1929—Tela, Honduras; idem, l.c., **71**, p. 311, 1931—Almirante, Western River, Changuinola, Shepherd Island, and Cricamola, Panama; Huber, Proc. Acad. Nat. Sci. Phila., **84**, p. 212, 1932—Prinzapolka, Nicaragua; Stone, l.c., p. 299, 1932—Cantarranas, Tela, and Puerto Castilla, Honduras.

Asturina magnirostris (not *Falco magnirostris* Gmelin) Moore, Proc. Zool. Soc. Lond., **27**, p. 52, 1839—Omoa, Honduras; Taylor, Ibis, 1860, p. 225—east of Comayagua, Honduras; Lawrence, Ann. Lyc. Nat. Hist. N. Y., **9**, p. 134, 1868—Juan, San José, and Turrialba, Costa Rica; Frantzius, Journ. Orn., **17**, p. 369, 1869—highlands of Costa Rica.

Asturina ruficauda Salvin, Ibis, 1869, p. 317—Costa Rica; Sclater and Salvin, Exot. Orn., p. 175, 1869—part, Costa Rica; iidem, Proc. Zool. Soc. Lond., 1870, p. 838—San Pedro, Honduras.

Rupornis ruficauda Nutting, Proc. U. S. Nat. Mus., **5**, p. 403, 1883—La Palma de Nicoya, Costa Rica; idem, l.c., **6**, p. 377, 1883—San Juan del Sur, Pacific Nicaragua; idem, l.c., **6**, pp. 388, 395, 1884—Sucuyá and Island of Ometépe, Nicaragua; Zeledón, Anal. Mus. Nac. Costa Rica, **1**, p. 126, 1887—Liberia, San Mateo, and La Palma de San José, Costa Rica; Ridgway, Proc. U. S. Nat. Mus., **10**, pp. 583, 593, 1887—Trujillo and Segovia River, Honduras; Cherrie, Auk, **9**, p. 328, 1892—San José (rare) and down to the Pacific coast, Costa Rica; Richmond, Proc. U. S. Nat. Mus., **16**, p. 521, 1893—Rio Escondido, Nicaragua; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 76, 1900—part, Honduras (Omoa, San

[1] *Buteo magnirostris argutus* (Peters and Griscom) is a very poor race, hardly deserving recognition. It agrees with Guatemalan birds in tail markings (light bands grayish brown, outwardly and along edges washed with tawny; lateral rectrices extensively tinged with rufous on basal portion), but the upper parts perhaps slightly paler, with a grayish cast; the pileum *sometimes* decidedly grayish and somewhat contrasting with the more brownish back; breast *possibly* less flammulated with buffy or cinnamon. It may be termed a pretty variable intergrade to the more grayish-backed form with wholly tawny tail-bands of southwestern Costa Rica and eastern Panama. Two birds from San Pedro, Honduras, and one from near Puerto Limón, Costa Rica, have purely gray brown tail-bands and are barely distinguishable from the Savanna Grande specimen mentioned under *B. m. direptor*.

Additional material examined.—Honduras: San Pedro, 2.—Nicaragua: Chinandega, 3; Rio Escondido, 2.—Costa Rica: Irazú, 1; Bebedéro, Guanacaste, 10; twenty-eight miles from Puerto Limón, 1.

Pedro, Truxillo, Segovia River), Nicaragua, and Costa Rica; Carriker, Ann. Carnegie Mus., **6**, p. 459, 1910—Costa Rica (part, excl. of Térraba Valley localities); Rendahl, Ark. Zool., **12**, No. 8, p. 9, 1919—Sipurio (Talamanca), Costa Rica, and Zapatera, Nicaragua.

Rupornis magnirostris ruficauda Swann, Syn. List Accip., p. 56, 1919—part, Nicaragua and Costa Rica; idem, Syn. Accip., p. 93, 1922 (in part); Kennard and Peters, Proc. Bost. Soc. N. H., **38**, p. 449, 1928—Almirante and Chiriquicito, Panama; Swann, Monog. Bds. Prey, **1**, p. 440, 1930—Nicaragua.

Buteo magnirostris argutus Peters, Bds. World, **1**, p. 237, 1931 (range); Griscom, Bull. Mus. Comp. Zool., **78**, p. 299, 1935—Caribbean slope of western Panama.

Range.—Central America from Honduras south on the Caribbean slope to the Chiriquí lagoon region of Panama, and on the Pacific slope to northwestern Costa Rica (Guanacaste).

Field Museum Collection.—5: Honduras (San José, Santa Barbara, 1; Monte Redondo, Tegucigalpa, 1; Las Flores, Tegucigalpa, 1); Nicaragua (San Geronimo, Chinandega, 1; San Emilio, Lake Nicaragua, Rivas, 1).

*Buteo magnirostris petulans van Rossem.[1] PANAMA LARGE-BILLED HAWK.

Asturina ruficauda (not *Accipiter ruficaudus* Vieillot, 1807)[2] Sclater and Salvin, Proc. Zool. Soc. Lond., 1869, p. 133—part, Veraguas, Davíd (Chiriquí), and Panama (orig. descr.; type, from Lion Hill, Panama Railroad, in British Museum, examined);[3] iidem, Exot. Orn., p. 175, pl. 90 (right fig.), Apr. 1869—part, Veragua and Panama; Salvin, Proc. Zool. Soc. Lond., 1870, p. 215—Calovévora, Veragua, and Bugaba, Chiriquí; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 205, 1874—part, spec. a, Chiriquí.

[1] *Buteo magnirostris petulans* van Rossem may be recognized from the related races by having the tail-bands wholly tawny (only sometimes slightly tinged with grayish towards the edges). Compared to *B. m. argutus*, the upper parts are lighter, more grayish, and the chest is more uniformly brownish gray. Birds from southwestern Costa Rica (Térraba Valley and Golfo Dulce) are quite identical with others from Panama.

Additional material examined.—Costa Rica: Rio Tigre, near Puerto Jiménez, Golfo Dulce, 1; Boruca, 2.—Panama: El Banco, Chiriquí, 1; Bugaba, Chiriquí, 1; Chiriquí, 1; Calovévora, Veraguas, 2; Paraiso Station, Panama Railroad, 2; Lion Hill, Panama Railroad, 1.

[2] A synonym of *Buteo jamaicensis borealis* (Gmelin).

[3] The description fits the red-tailed form. In Exot. Orn., p. 176, 1869, it is expressly stated that the rufous tail-bands are particularly bright in examples from Panama, whence the authors had received a considerable series from Messrs. "McCleannan" and Hughes, and that the principal figure was taken from one of the Panama specimens. We may, therefore, admit that the McLeannan specimen from Lion Hill is correctly labeled as "the type, figured Exot. Orn., pl. 90."

Buteo magnirostris petulans van Rossem, Condor, **37**, p. 215, July, 1935—new name for *Asturina ruficauda* Sclater and Salvin, preoccupied; Sassi, Temminckia, Leiden, **3**, p. 298, 1938 (disc.).

Asturina magnirostris (not *Falco magnirostris* Gmelin) Lawrence, Ann. Lyc. Nat. Hist. N. Y., **7**, p. 316, 1861—Isthmus of Panama; idem, l.c., **8**, p. 179, 1865—Davíd, Chiriquí; Salvin, Proc. Zool. Soc. Lond., 1867, p. 158—Davíd.

Rupornis ruficauda Cherrie, Anal. Inst. Fis.-Geog. Mus. Nac. Costa Rica, **4**, p. 146, 1893—Boruca and Buenos Aires, Costa Rica; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 76, 1900—part, Panama (Davíd, Chiriquí, Bugaba, Calovévora, Lion Hill, Paraiso Station); Bangs, Auk, **18**, p. 358, 1901—Divalá, Chiriquí; idem, Proc. New Eng. Zool. Cl., **3**, p. 20, 1902—Boquete, Chiriquí; Thayer and Bangs, Bull. Mus. Comp. Zool., **46**, p. 214, 1906—savanna of Panama; Bangs, Auk, **24**, p. 290, 1907—Boruca and El Pózo de Térraba, Costa Rica; Carriker, Ann. Carnegie Mus., **6**, p. 459, 1910—Costa Rica (part, El General de Térraba, Pózo Azúl, El Pózo, and Buenos Aires de Térraba); Hallinan, Auk, **41**, p. 311, 1924—Culebra-Arraijan Trail, Panama.

Rupornis magnirostris ruficauda Stone, Proc. Acad. Nat. Sci. Phila., **70**, p. 249, 1918—Trinidad River, south of Gatún, Panama; Swann, Syn. List Accip., p. 56, 1919—part, Panama; idem, Syn. Accip., p. 93, 1921—part, Panama; Bangs and Barbour, Bull. Mus. Comp. Zool., **65**, p. 194, 1922—Jesusito, Darien; Swann, Monog. Bds. Prey, **1**, p. 441, 1930—part, Panama; Peters and Griscom, Proc. New Engl. Zool. Cl., **11**, p. 47, 1929—Costa Rica and Panama (crit.).

Buteo magnirostris ruficauda(us) Peters, Bds. World, **1**, p. 238, 1931 (range); Griscom, Bull. Mus. Comp. Zool., **78**, p. 299, 1935—Pacific slope of Panama; Aldrich, Sci. Pub. Cleveland Mus. N. H., **7**, p. 43, 1937—Paracoté, Azuero Peninsula, Panama.

Range.—Southwestern Costa Rica, from the Térraba Valley southward along the Pacific side of Panama to the Rio Tuyra.

Field Museum Collection.—4: Costa Rica (Buenos Aires, Puntarenas, 2); Panama (Boqueron, Chiriquí, 1; Iguana Island, Los Santos, 1).

Buteo magnirostris alius (Peters and Griscom).[1] PEARL ISLAND HAWK.

Rupornis magnirostris alia Peters and Griscom, Proc. New Eng. Zool. Cl., **11**, p. 48, Aug. 30, 1929—San Miguel, El Rey, Pearl Islands (type in Museum of Comparative Zoology, Cambridge, Mass.).

[1] *Buteo magnirostris alius* (Peters and Griscom); Similar to *B. m. petulans* but slightly smaller, and rufous of wings and tail decidedly paler; feathers of chest with two incomplete whitish bars, producing a spotted appearance; barring of abdomen coarser; longest under wing coverts nearly immaculate. Wing, 207, (female) 219–226.

A single specimen from the Pearl Islands agrees exactly with the original description except that the wings and tail are not paler than in *petulans*.

Asturina ruficauda (not of Sclater and Salvin) Sharpe, Cat. Bds. Brit. Mus., **1**, p. 205, 1874—part, spec. b, Pearl Islands.

Rupornis ruficauda Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 76, 1900—part, Pearl Islands; Thayer and Bangs, Bull. Mus. Comp. Zool., **46**, p. 144, 1905—San Miguel Island; Rendahl, Ark. Zool., **13**, No. 4, p. 20, 1920—San José Island.

Buteo magnirostris alius Peters, Bds. World, **1**, p. 38, 1931 (range); Griscom, Bull. Mus. Comp. Zool., **78**, p. 299, 1935—Pearl Islands; Murphy, Auk, **62**, p. 116, 1945—San Miguel, Pearl Islands, Panama.

Range.—Islands of San Miguel and San José, Pearl Archipelago, Bay of Panama.

***Buteo magnirostris insidiatrix** (Bangs and Penard).[1] SANTA MARTA LARGE-BILLED HAWK.

Rupornis magnirostris insidiatrix Bangs and Penard, Bull. Mus. Comp. Zool., **62**, p. 36, April, 1918—Santa Marta Mountains, Colombia (type in Museum of Comparative Zoology, Cambridge, Mass.); Todd and Carriker, Ann. Carnegie Mus., **14**, p. 154, 1922—Bonda, Mamatoco, Don Diego, Punto Caiman, Tierra Nueva, Minca, Fundación, and Dibulla, Colombia (crit.); Swann, Syn. Accip., p. 92, 1922—Colombia and Venezuela (Mérida); Peters and Griscom, Proc. New Eng. Zool. Cl., **11**, p. 48, 1929—Santa Marta to extreme eastern Panama (crit.); Swann, Monog. Bds. Prey, **1**, p. 439, 1930—Colombia and Venezuela (monog.); Darlington, Bull. Mus. Comp. Zool., **71**, p. 367, 1931—Rio Frio, Magdalena, Colombia.

Asturina magnirostris (not *Falco magnirostris* Gmelin) Cassin, Proc. Acad. Nat. Sci. Phila., 1860, p. 132—Turbo, Colombia; Sclater and Salvin, Proc. Zool. Soc. Lond., 1868, p. 169—Venezuela (spec. examined); iidem, l.c., 1869, p. 131—part, Venezuela; Wyatt, Ibis, 1871, p. 382—La Cruz,

[1] *Buteo magnirostris insidiatrix* (Bangs and Penard): About as pale above as *B. m. petulans*, though even slightly clearer gray; but easily distinguished by pure grayish tail-bands without any tawny; clearer gray chest with very little, if any of the buffy markings so numerous and conspicuous in *petulans;* white instead of strongly buffy ground color of the posterior lower parts with the cross-bands not ochraceous-tawny, but mainly dark gray shaded with dull tawny; buffy white instead of deep buffy tibial feathers, with narrower, rufescent dusky rather than ochraceous-tawny bars. From typical *magnirostris*, the present form may be separated by lighter gray upper parts and throat, and also by generally narrower, less rufescent barring underneath.

The racial characters of *insidiatrix* are well shown by the only two available specimens from the type locality. Mérida birds are not quite so clear a gray above—though one or two run pretty close—but others are only with difficulty separable from Guianan skins. A single example obtained presumably in the Caracas region by Anton Goering resembles the Mérida average. Birds from northwestern Venezuela, as a whole, appear to be intermediate between *insidiatrix* and *magnirostris*, and in the absence of an adequate series from Santa Marta we provisionally follow Peters in referring them to the first-named race.

Additional material examined.—Colombia: Santa Marta, 2; Los Monos, near Bucaramanga, 1.—Venezuela: Caracas, 2; Limones, Mérida, 1; La Azulita, Mérida, 1; Valle, Mérida, 10; unspecified, 1.

south of Ocaña, Colombia; Salvin and Godman, Ibis, 1880, p. 176—Santa Marta and Minca, Colombia; Berlepsch, Journ. Orn., **32**, p. 316, 1884—Los Monos, near Bucaramanga, Colombia.

Rupornis magnirostris Bangs, Proc. Biol. Soc. Wash., **12**, p. 132, 1898—Santa Marta; Allen, Bull. Amer. Mus. N. H., **13**, p. 129, 1900—Bonda, Colombia; Robinson and Richmond, Proc. U. S. Nat. Mus., **24**, p. 168, 1901—La Guaira and San Julián, Venezuela.

Rupornis magnirostris magnirostris Swann, Auk, **38**, p. 362, 1921—Valle, Culata, and Escorial, Mérida, Venezuela (crit.).

Buteo magnirostris insidiatrix Peters, Bds. World, **1**, p. 238, 1931 (range); Griscom, Bull. Mus. Comp. Zool., **72**, p. 314, 1932—Permé, extreme eastern Darien; idem, l.c., **78**, p. 299, 1935—Permé and Obaldia, Darien; de Schauensee, Not. Nat. Acad. Nat. Sci. Phila., **156**, p. 1, 1945 (range).

Buteo magnirostris magnirostris Wetmore, Proc. U. S. Nat. Mus., **87**, p. 185, 1939—part, Venezuela (Valle, Merida; Maracay).

Range.—Caribbean slope of extreme eastern Darien (Permé, Obaldia) and east through northern Colombia (Magdalena; Santa Marta region; La Cruz and Los Monos, Santander) to northwestern Venezuela (Mérida to Caracas).

Field Museum Collection.—12: Colombia (Baranova, Atlantico, 1; Cucuta, Santander, 1); Venezuela (Colon, Tachira, 1; Paramo de Tambor, Tachira, 1; El Valle, Merida, 2; Orope, Zulia, 2; Rio Aurare, Zulia, 1; Encontrados, Zulia, 2; Maracay, Aragua, 1).

*Buteo magnirostris ecuadoriensis (Swann).[1] ECUADORIAN LARGE-BILLED HAWK.

Rupornis magnirostris ecuadoriensis Swann, Syn. Accip., p. 91, Jan., 1922—"Vaqueroi"=Vaqueria, Prov. Esmeraldas, northwestern Ecuador (type in coll. of H. Kirke Swann, now in Museum of Comparative Zoology, Cambridge, Mass.); idem, Monog. Bds. Prey, **1**, p. 438, 1930—northwestern Ecuador (monog.).

[1] *Buteo magnirostris ecuadoriensis* (Swann): Very similar to *B. m. magnirostris*, but upper parts lighter, more grayish, and the grayish tail-bands more or less suffused at least with traces of tawny.

Chapman has discussed at length the variation exhibited by birds from Colombia west of the eastern Andes, but from the limited material examined it seems to us that the two races (*magnirostris* and *"ruficauda"*) which he maintains, narrow down to a single excessively variable form, connecting the tawny-tailed *petulans* with *insidiatrix* and *magnirostris*. Three topotypes of *ecuadoriensis* from Vaqueria in the Vienna Museum are, indeed, very close to *magnirostris*, though differing by lighter grayish dorsal surface and the presence of dull tawny edges to the gray tail-bands. A bird from Atuncela, western Andes of Colombia, is quite similar. Two adults from Concordia and two from Retiro have just slight traces of tawny in the tail. The male from Concordia is very nearly as clear gray above as some *insidiatrix* from Mérida, and in the broad, decidedly rufescent barring underneath it can be matched by a male from Valle, Mérida. The three others, however, are unquestionably more broadly barred with darker rufous than the series from Santa Marta and Mérida, more like typical *magnirostris*, of Guiana. While we have not seen any Magdalena Valley birds, which

Asturina magnirostris (not *Falco magnirostris* Gmelin) Sclater, Proc. Zool. Soc. Lond., **27**, p. 147, 1859—Pallatanga, Ecuador; idem, l.c., **28**, p. 288, 1860—Babahoyo, Ecuador; idem and Salvin, l.c., 1879, p. 540—Retiro, Concordia, Santa Elena, Medellin, and Remedios, Colombia (nest and eggs descr.); Hartert, Nov. Zool., **5**, p. 502, 1898—Chimbo, Ecuador; Goodfellow, Ibis, 1902, p. 221—Popayán, Colombia.

Rupornis magnirostris Robinson, Flying Trip to Tropics, p. 154, 1895—Guaduas, Colombia; Stone, Proc. Acad. Nat. Sci. Phila., 1899, p. 304—Honda and Ibagüe, Colombia; Salvadori and Festa, Boll. Mus. Zool. Torino, **15**, No. 368, p. 30, 1900—part, Vinces, western Ecuador; Piguet, Mém. Soc. Neuch. Sci. Nat., **5**, p. 806, 1914—Angelopolis and Medellin, Colombia; Berlioz, Bull. Mus. Hist. Nat. Paris, (2), **4**, p. 234, 1932—Rio San José, Ecuador.

Rupornis magnirostris magnirostris Chapman, Bull. Amer. Mus. N. H., **36**, p. 243, 1917—part, Atrato River, Dabeiba, Barbacoas, Puerto Valdivia, Santa Elena, Barro Blanco, (?)La Palma, (?)Chicoral, and (?)west of Honda, Colombia; idem, l.c., **55**, p. 231, 1926—part, western Ecuador (Bucay, Pato de Pájaro, Punta Santa Ana, Alamor, Naránjo, Daule, Santa Rosa).

Rupornis magnirostris ruficauda (not *Asturina ruficauda* Sclater and Salvin) Chapman, Bull. Amer. Mus. N. H., **36**, p. 244, 1917—Noanamá, Las Lomitas, Cali, Guengüe, Popayán, La Manuelita, Miraflores, Rio Frio, and Salento, Colombia.

Buteo magnirostris ecuadoriensis Peters, Bds. World, **1**, p. 238, 1931 (range); de Schauensee, Not. Nat. Acad. Nat. Sci. Phila., **156**, p. 2, 1945 (range; disc.).

Range.—Western Colombia (western and central Andes) and western Ecuador.

Field Museum Collection.—12: Colombia (San Antonio, Valle de Cauca, 1; Timba, Valle de Cauca, 1; El Tambo, Munchique, Cauca, 7); Ecuador (Montes de Achotal, Esmeraldas, 1; San Mateo, Esmeraldas, 1; Puente de Chimbo, Guayas, 1).

***Buteo magnirostris magnirostris** (Gmelin). LARGE-BILLED HAWK.

Falco magnirostris Gmelin, Syst. Nat., **1**, (1), p. 282, 1788—based on "Épervier à gros bec, de Cayenne" Daubenton, Pl. Enl., pl. 464, Cayenne.

Falco insectivorus Spix, Av. Spec. Nov. Bras., **1**, p. 17, pl. 8a, 1824—"in sylvis provinciae Rio de Janeiro et Parae"=Pará, Brazil (type in Munich Mu-

may turn out to be *insidiatrix*, we are inclined to maintain those from the central and western Andes of Colombia together with the inhabitants of western Ecuador as constituting a slightly differentiated form, for which Swann's term *ecuadoriensis* is available.

Additional material examined.—Colombia: Concordia, western Andes, 2; Atuncela, western Andes, 1; Retiro, central Andes, 2.—Western Ecuador: Vaqueria, 3; Vinces, 1; Santa Rita, 1; Chimbo, 1.

seum examined; cf. Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **22**, No. 3, p. 572, 1906).[1]

Rupornis magnirostris Cabanis, in Schomburgk, Reisen Brit. Guiana, **3**, "1848," p. 737, 1849—coast region; Salvadori and Festa, Boll. Mus. Zool. Torino, **15**, No. 368, p. 30, 1900—part, Gualaquiza, Ecuador; Berlepsch and Hartert, Nov. Zool., **9**, p. 112, 1902—Rio Orinoco (Altagracia, Caicara) and Rio Caura (Suapuré, La Prición), Venezuela; Berlepsch, l.c., **15**, p. 292, 1908—Approuague River and Cayenne, French Guiana; Beebe, Zoologica (N.Y.), **1**, p. 80, 1909—La Brea, Orinoco Delta; Stone, Proc. Acad. Nat. Sci. Phila., **65**, p. 195, 1913—Cariaquito, Paria Peninsula, and Pedernales, Orinoco Delta, Venezuela; Snethlage, Bol. Mus. Goeldi, **8**, p. 132, 1914—part, Pará, Marajó (Pindobal, Pacoval, Dunas, Magoary, Chaves, São Natal), Mexiana, and Monte Alegre, Brazil; Cherrie, Sci. Bull., Mus. Brookl. Inst., **2**, p. 342, 1916—Orinoco region (nest and eggs descr.); Chubb, Bds. Brit. Guiana, **1**, p. 239, 1916 (numerous localities); Stone, Proc. Acad. Nat. Sci. Phila., **80**, p. 154, 1928—Pará and Rio Inhangapy, Pará, Brazil; Young, Ibis, 1929, p. 8—Blairmont, British Guiana (habits).

Asturina magnirostris Sclater, Proc. Zool. Soc. Lond., **26**, p. 451, 1858—Gualaquiza, Ecuador; idem and Salvin, 1867, p. 589—Mexiana; iidem, l.c., 1869, p. 131—part, Guianas, Brazil (Rio Negro, Rio Branco, Rio Madeira, Mexiana), and Colombia ("Bogotá") (monog.); Layard, Ibis, 1873, p. 394—Pará; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 207, 1874—part, spec. e–i, Mexiana and British Guiana; Berlepsch, Ibis, 1884, p. 436—Rio Apuré, Venezuela; Salvin, Ibis, 1886, p. 72—Bartica Grove, Camacusa, Merumé Mountains, and River Atapurau, British Guiana; Sclater, Ibis, 1887, p. 318—Maccasseema, British Guiana; Phelps, Auk, **14**, p. 366, 1897—Cumanacoa (Sucre), Venezuela; Goeldi, Ibis, 1897, p. 161—Amapá, northern Pará; Loat, Ibis, 1898, p. 563—British Guiana; Goeldi, Ibis, 1903, p. 497—Rio Capim, Pará; Hagmann, Zool. Jahrb. (Syst.), **26**, p. 21, 1907—Mexiana.

Astur macrorhynchus (Natterer MS.) Pelzeln, Orn. Bras., **1**, p. 6, 1868—Borba (Rio Madeira), San Carlos (Rio Guainia), Forte do Rio Branco, Barra do Rio Negro (=Manáos) and Cajútuba (near Pará), Brazil (nomen nudum).

[*Buteo* (*Rupornis*) *magnirostris*] var. *magnirostris* Ridgway, Proc. Bost. Soc. N. H., **16**, p. 87, 1873—part, Guiana, northern Brazil, and Colombia (Bogotá).

Asturina natteri (not *A. nattereri* Sclater and Salvin) Allen, Bull. Essex Inst., **8**, p. 82, 1876—Santarém (Rhomes).

Rupornis magnirostris nattereri Riker and Chapman, Auk, **8**, p. 160, 1891—Santarém (crit.).

Rupornis magnirostris magnirostris Hellmayr, Nov. Zool., **14**, p. 38, 1907—Obidos; idem, l.c., **17**, p. 411, 1910—part, Calama, Rio Madeira; idem, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **26**, No. 2, pp. 96, 121,

[1] Recent re-examination shows the type to agree in every particular with other examples from Pará and Marajó. According to Spix's original account, there was in the collection but one specimen, which must have come from Pará, since at Rio de Janeiro, the other locality mentioned, the well-characterized *B. m. nattereri* is found.

1912—Pará region (Pará, Cajútuba, Rio Capim) and Mexiana; Bangs and Penard, Bull. Mus. Comp. Zool., **62**, p. 36, 1918—Paramaribo and Wanaweg, Surinam; Swann, Syn. List Accip., p. 55, 1919—part, Guiana, eastern Venezuela, and "Lesser Antilles"; Chapman, Bull. Amer. Mus. N. H., **36**, p. 243, 1917—part, Villavicencio, Colombia; idem, l.c., **55**, p. 231, 1926—part, below San José, eastern Ecuador; Swann, Monog. Bds. Prey, **1**, p. 437, 1930—Guiana, Venezuela and "Martinique" (monog.).

Rupornis magnirostris zamorae Chapman, Amer. Mus. Nov., **31**, p. 3, March 2, 1922—Sabanilla, Rio Zamora, eastern Ecuador (type in the American Museum of Natural History, New York); idem, Bull. Amer. Mus. N. H., **55**, p. 232, 1926—Sabanilla and Zamora (crit.).

Buteo magnirostris magnirostris Peters, Bds. World, **1**, p. 238, 1931 (range); Brodkorb, Occ. Pap., Mus. Zool. Univ. Michigan, **349**, p. 2, 1937—Caviana, Brazil; Wetmore, Proc. U. S. Nat. Mus., **87**, p. 185, 1939—part, Parapara, Venezuela (range and tax.); de Schauensee, Not. Nat. Acad. Nat. Sci. Phila., **156**, p. 1, 1945 (range; crit.).

Range.—The Guianas, southern and eastern Venezuela, west to the eastern base of the east Colombian Andes (Villavicencio) and eastern Ecuador; northern Brazil, south to the south bank of the Amazon from the Pará region to the right bank of the Rio Madeira (Borba, Calama).[1]

Field Museum Collection.—46: Colombia (Villavicencio, Meta, 1; Florencia, Caqueta, 1); Ecuador (Rio Villano, Oriente, 1); British Guiana (Georgetown, 2; Charity, 1; Buxton, 4; Rockstone, 3); Dutch Guiana (Paramaribo, 2); French Guiana (Lago Novo, 1); Brazil (Igarape Aniba, Amazonas, 4; Itacoatiara, Amazonas, 5; Bõa Vista, Rio Branco, Amazonas, 3; Obidos, Pará, 3; Piquiatuba, Pará, 5; Boca Ituqui, Pará, 4; Monte Alegre, Pará, 3; Caxiricatuba, Rio Tapajos, 3).

*Buteo magnirostris occiduus (Bangs).[2] PERUVIAN LARGE-BILLED HAWK.

[1] Birds from the Caura-Orinoco region are identical with Guianan topotypes and so are specimens from north of the Amazon (Obidos, Manáos, Rio Branco). We are likewise quite unable to separate a series from Pará (*insectivorus*) from typical *magnirostris*, which seems to range south of the river to the right bank of the Rio Madeira, since an adult male from Borba, like one from Calama previously examined, is to all intent a perfectly normal example of the nominate form. Birds from eastern Ecuador, as a whole, agree fairly well with a Guianan series, though some individuals, by darker upper parts, rufous-suffused breast, etc., strongly suggest *occiduus*. Specimens of this color-type, however, also spring up occasionally in the eastern part of the range of *magnirostris*, a female from Caicara, Rio Orinoco, being especially noteworthy. We cannot, therefore, see in *R. m. zamorae* anything but an individual mutation.

[2] *Buteo magnirostris occiduus* (Bangs) is exactly intermediate between *B. m. magnirostris* and *B. m. saturatus*. The light tail-bands are brownish gray, more brownish than in *magnirostris*, hence more as in *nattereri*, and not light tawny as is the rule in *saturatus;* the upper parts are darker and markedly more brownish

Rupornis magnirostris occidua Bangs, Proc. Biol. Soc. Wash., **24**, p. 187, June 23, 1911—Rio Tambopata, [southeastern] Peru (type in Museum of Comparative Zoology, Cambridge, Mass.); Bangs and Noble, Auk, **35**, p. 444, 1918—Bellavista and Perico, Rio Marañón, Peru; Swann, Syn. List Accip., p. 55, 1919—Peru; Hellmayr, Arch. Naturg., **85**, A, Heft 10, p. 129, 1919—Occobamba (near Cuzco), Marcapata, Urubamba Valley, and Chaquimayo, southeastern Peru (crit.); Chapman, Bull. U. S. Nat. Mus., **117**, p. 59, 1921—Rio Comberciato, Urubamba, Peru (crit.); Swann, Syn. Accip., p. 92, 1922—Peru; Zimmer, Field Mus. Nat. Hist., Zool. Ser., **17**, p. 247, 1930—Chinchao, Huánuco, Peru; Swann, Monog. Bds. Prey, **1**, p. 439, 1930—Peru; Gyldenstolpe, K. Svensk. Vetensk. Akad. Handl., (3), **22**, p. 27, 1945—João Pessõa, Rio Juruá (disc.); idem, l.c., (3), **23**, p. 51, 1945—Bolivia (Riberalta and Victoria, El Beni) (disc.).

Nisus magnirostris (not *Falco magnirostris* Gmelin) Tschudi, Unters. Faun. Peru., Orn., p. 104, 1846—forest region of Peru.

Asturina magnirostris Sclater, Proc. Zool. Soc. Lond., **25**, p. 261, 1857—Ega, Rio Solimões; idem and Salvin, l.c., 1866, p. 198—upper Ucayali; iidem, l.c., 1867, p. 753—Xeberos and Chyavetas; iidem, l.c., 1869, p. 131—part, eastern Peru; iidem, l.c., 1873, p. 303—upper and lower Ucayali, Xeberos, Chyavetas, Chamicuros, and Santa Cruz; Taczanowski, l.c., 1874, p. 552—Monterico; idem, l.c., 1879, p. 241—Tambillo; idem, l.c., 1882, p. 46—Huambo; idem, Orn. Pér., **1**, p. 120, 1884—Peruvian localities.

Asturina nattereri (not of Sclater and Salvin, Proc. Zool. Soc. Lond., 1869, p. 132) Sclater and Salvin, Proc. Zool. Soc. Lond., 1869, p. 598—Cosnipata; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 208, 1874—part, spec. h–k, Cosnipata, Peru; Taczanowski, Orn. Pér., **1**, p. 123, 1884—Monterico.

Rupornis magnirostris Berlepsch, Journ. Orn., **37**, p. 317, 1889—upper Ucayali; idem and Stolzmann, Proc. Zool. Soc. Lond., 1902, (2), p. 42—Borgoña, Dept. Junín; Snethlage, Journ. Orn., **56**, p. 22, 1908—Cachoeira and Bom Lugar, Rio Purús; idem, Bol. Mus. Goeldi, **8**, p. 132, 1914—part, Rio Purús.

Rupornis nattereri Berlepsch and Stolzmann, Proc. Zool. Soc. Lond., 1902, (2), p. 42—La Merced, Chanchamayo, Peru; iidem, Ornis, **13**, pp. 99, 124, 1906—Idma, Huaynapata, and Rio Cadena, Marcapata.

than in *magnirostris*, though not so dark as in *saturatus;* the upper tail coverts are mostly buffy as in the southern form, but sometimes white as in *magnirostris;* the throat and chest are gray as in the latter, but profusely variegated with cinnamomeous; the barring on the posterior lower parts is wider and more deeply rufescent; the axillars and under wing coverts are more or less buffy as in *saturatus*, rarely white as in the nominate race. Numerous individuals have traces of tawny in the brownish gray tail-bands, and in this respect are matched by occasional specimens of *saturatus*, notably one from Tilotilo. However, *B. m. occiduus*, in spite of its excessive variability, may generally be distinguished from *saturatus* by smaller size, less blackish head, and the predominantly brownish gray instead of light tawny tail-bands. Birds from the Rio Purús and the left bank of the Rio Madeira seem to be inseparable from a Peruvian series.

Additional material examined.—Peru: Upper Ucayali, 2; Perené, Dept. Junín, 1; Cosnipata, 2; Occobamba, Cuzco, 1; Urubamba Valley, alt. 700 meters, 1; Marcapata, 2; Chaquimayo, Carabaya, 1; Oroya, Dept. Puno, 1; Rio Linimbare, near Oroya, Dept. Puno, 1.—Brazil: Uby-no-Cachoeira, Rio Purús, 1; Bom Lugar, Rio Purús, 1; Marmellos, Rio Madeira, 1.

Rupornis magnirostris magnirostris Hellmayr, Nov. Zool., **14**, p. 406, 1907—Humaytá, Rio Madeira; idem, l.c., **17**, p. 411, 1910—part, Marmellos, Rio Madeira; Naumburg, Bull. Amer. Mus. N. H., **60**, p. 108, 1930—Rio Solimões.

Rupornis pucherani (not *Asturina pucherani* J. & E. Verreaux) Chubb, Ibis, 1919, p. 282—Oroya and Rio Linimbare, Peru (spec. examined).

Buteo magnirostris occiduus Peters, Bds. World, **1**, p. 238, 1931 (range); de Schauensee, Not. Nat. Acad. Nat. Sci. Phila., **156**, p. 2, 1945 (dist. chars.; range).

Buteo magnirostris inca de Schauensee, Not. Nat. Acad. Nat. Sci. Phila., No. 156, p. 2, Aug. 1, 1945—La Oroya, Inambari, Puno, Peru (type in Academy of Natural Sciences of Philadelphia).

Range.—Eastern Peru, from the Marañón south to extreme northern Bolivia (Victoria, El Beni), and western Brazil south of the Amazon east to the left bank of the Rio Madeira (Marmellos, Humaytá).

Field Museum Collection.—31: Peru (Rioja, San Martín, 1; Lagunas, Loreto, 2; Yurimaguas, Loreto, 1; Poco Tambo, Huánuco, 1; Chinchao, Huánuco, 1; San Ramón, Rio Chanchamayo, Junín, 3; Alto Quimire, Rio Chanchamayo, Junín, 1; Rio Ucayali, near Rio Chanchamayo, Junín, 1); Brazil (João Pessõa, Rio Juruá, 3; Lago Grande, Rio Juruá, 1; Rio Eiru, Rio Juruá, 1; Labrea, Rio Purús, 5; Canutama, Rio Purús, 6; Lago do Baptista, Amazonas, 4).

***Buteo magnirostris saturatus** (Sclater and Salvin).[1] WESTERN LARGE-BILLED HAWK.

Asturina saturata Sclater and Salvin, Proc. Zool. Soc. Lond., 1876, p. 357—"Apollo" [=Apolobamba], and Tilotilo, Bolivia (type, from Apolobamba, in Salvin–Godman Collection, now in the British Museum, examined); iidem, l.c., 1879, p. 636—same localities.

[1] *Buteo magnirostris saturatus* (Sclater and Salvin) may be distinguished from the neighboring races by the light tawny (instead of brownish gray) coloration of the tail-bands.

Comparison of adequate series shows Paraguayan birds to be inseparable from those of Bolivia. The type of *A. saturata* is an unusually rufous individual with the chest nearly plain tawny (with very few buffy markings) and the tawny barring on breast and upper belly rather broad. However, two other skins from Tilotilo (near the type locality) are much paler beneath, the chest being dull ochraceous tawny with buffy and dusky markings, and the bars on the posterior under parts duller, though variable in width. Two adults from Esperanza, Bolivia, have even less ochraceous tawny on the chest, the feathers being broadly edged with buffy on either side, and the width of the tawny bars posteriorly is equally variable. The light tail-bands are mostly tawny or ochraceous-tawny, though to a varying degree shaded with grayish here and there, but only in one from Tilotilo is the predominating color brownish gray. The tone of the basal portion of the remiges varies from ochraceous-tawny to deep tawny. Ten adults from Paraguay and six from northwestern Argentina, although not one of them is quite so rufous on the chest as the type of *A. saturata*, show otherwise the same

Astur magnirostris (not *Falco magnirostris* Gmelin) d'Orbigny, Voy. Amér. Mérid., Ois., p. 91, 1835—part, Bolivia and Santa Fé; Lafresnaye and d'Orbigny, Syn. Av., **1**, in Mag. Zool., **7**, cl. 2, p. 5, 1837—part, Yungas, Chiquitos, and Moxos, Bolivia.

[*Buteo* (*Rupornis*) *magnirostris*] var. *pucherani* (not *Asturina pucherani* Verreaux) Ridgway, Proc. Bost. Soc. N. H., **16**, p. 89, 1873—part, Yungas, Bolivia.

Asturina pucherani Sharpe, Cat. Bds. Brit. Mus., **1**, p. 205, 1874—part, spec. c, Bolivia; Dalgleish, Proc. Roy. Phys. Soc. Edin., **10**, p. 83, 1889—Est. Ytañu, Paraguay (nest and egg descr.); Kerr, Ibis, 1892, p. 142—lower Pilcomayo; Salvadori, Boll. Mus. Zool. Torino, **10**, No. 208, p. 19, 1895—Valenzuela, near Paraguarí, Paraguay; Lönnberg, Ibis, 1903, p. 465—Tatarenda and Aguairenda, Tarija, Bolivia; Grant, l.c., 1911, p. 330—Argentina (Riacho Ancho, Terr. Chaco; Colonia Mihanovitch, Terr. Formosa) and Paraguay (ten miles north of Villa Pilar).

Rupornis nattereri saturata Berlepsch, Journ. Orn., **35**, p. 28, 1887—Lambaré, Paraguay.

Rupornis saturata Allen, Bull. Amer. Mus. N. H., **2**, p. 104, 1889—part, Mapiri, Bolivia; Salvadori, Boll. Mus. Zool. Torino, **12**, No. 292, p. 28, 1897—Caiza, Bolivia, and San Lorenzo, Jujuy; Ménégaux, Rev. Franç. d'Orn., 1925, p. 281—Laguna de Tulip-Loman, near Icaño, Santiago del Estero.

Asturina nattereri (not of Sclater and Salvin) Stempelmann and Schulz, Bol. Acad. Nac. Cienc. Córdoba, **18**, p. 396, 1890—Córdoba.

Rupornis nattereri Salvadori, Boll. Mus. Zool. Torino, **15**, No. 378, p. 12, 1900—Urucúm, Matto Grosso.

Potamolegus superciliaris var. *furvicollis* Bertoni, Anal. Cient. Parag., **1**, (1), p. 161, Jan., 1901—Asunción, Paraguay (type in coll. of A. de W. Bertoni).

Rupornis pucherani Lillo, Anal. Mus. Nac. Buenos Aires, **8**, p. 204, 1902—Tucumán; Bruch, Rev. Mus. La Plata, **11**, p. 251, 1904—Orán, Salta; Lillo, Rev. Letr. Cienc. Soc., **3**, No. 13, p. 62, 1905—Tucumán; Chubb, Ibis, 1910, p. 72—Sapucay, Paraguay (descr.); Ménégaux, Rev. Franç. d'Orn., 1925, p. 281—Laguna de Canita, near Icaño, Santiago del Estero.

Rupornis magnirostris pucherani Hartert and Venturi, Nov. Zool., **16**, p. 239, 1909—part, Tucumán; Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 245, 1910—part, Tucumán, Salta, and Chaco; Swann, Syn. List Accip., p. 56, 1919—part, Paraguay and Bolivia; Wetmore, Bull. U. S. Nat. Mus., **133**, p. 111, 1926—part, Las Palmas, Chaco; Friedmann, Bull. Mus.

amount of variation in all the characters discussed above, and every one can be exactly matched by one or the other of the remaining Bolivian examples. The pileum, in this form, is constantly darker, more blackish than the back, and the throat is dusky or dark gray streaked with buffy. Birds from southern Paraguay average perhaps slightly larger.

Additional material examined.—Bolivia: Apolobamba, 1; Mapiri, 1; Tilotilo, 2; Torochito (Mizque), 1; Esperanza, 2; Buenavista, Santa Cruz, 2; unspecified, 1.—Argentina: Santa Barbara, Jujuy, 1; Rio Bermejo, Orán, Salta, 1; Tucumán, 4.—Paraguay: Lambaré, 1; Concepción, 4; ten miles above Villa Pilar, 1; Bernalcué, near Asunción, 2; Villa Rica, 3; Sapucay, 1; Cambyretá, 1.

Comp. Zool., **68**, p. 159, 1927—Bovril Islands, Santa Fé; Swann, Monog. Bds. Prey, **1**, p. 442, 1930 (monog.; in part).

Rupornis magnirostris subsp. *nattereri* Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 245, 1910—Córdoba.

Rupornis magnirostris nattereri Ménégaux, Rev. Franç. d'Orn., **5**, p. 24, 1917—Poconé, Matto Grosso.

Rupornis magnirostris saturata(us) Hellmayr, Nov. Zool., **28**, p. 183, 1921—Bolivia and Chiquitos (crit.); Swann, Syn. Accip., p. 94, 1922—Bolivia; Wetmore, Bull. U. S. Nat. Mus., **133**, p. 113, 1926—Tapia, Tucumán; Friedmann, Bull. Mus. Comp. Zool., **68**, p. 159, 1927—Alpachirri, Tucumán; Laubmann, Wiss. Erg. Deuts. Gran Chaco Exp., Vögel, p. 106, 1930—Villa Montes, Tarija, and Santa Cruz, Bolivia (young); Swann, Monog. Bds. Prey, **1**, p. 443, 1930—Bolivia to Tucumán; Steullet and Deautier, Obr. Cinc. Mus. La Plata, p. 436, 1936—Salta (Orán, Rio Colorado, Rio San Andrés, San Antonio, Rosario de Lerma, Urundal) and Tucumán (Trancas, Volcan); Gyldenstolpe, K. Svensk. Vetensk. Akad. Handl., (3), **23**, p. 50, 1945—Bolivia (Puerto Salinas, Reyes and Bresta, El Beni; Yungas del Cochabamba) (crit.).

Rupornis magnirostris superciliaris (not *Sparvius superciliaris* Vieillot?) Swann, Syn. Accip., p. 93, 1922—part, Paraguay and Argentina; Giacomelli, El Hornero, **3**, p. 77, 1923—near the capital, La Rioja; Naumburg, Bull. Amer. Mus. N. H., **60**, p. 107, 1930—Paraguay (Trinidad, Puerto Pinasco) and Matto Grosso (Urucúm); Laubmann, Wiss. Erg. Deuts. Gran Chaco Exp., Vögel, p. 104, 1930—Formosa (Yuncá Viejo, San José, Lapango, Tapikiolé, Tacaaglé); Steullet and Deautier, Obr. Cinc. Mus. La Plata, p. 434, 1936—Girardet, Santiago del Estero (crit.).

Rupornis magnirostris gularis (not *Asturina gularis* Schlegel) Laubmann, Wiss. Erg. Deuts. Gran Chaco Exp., Vögel, p. 103, 1930—Galvez (near Rosario) and Est. La Germania, Santa Fé (young birds); idem, Verh. Orn. Ges. Bay., **20**, p. 293, 1934—Est. La Geraldina, Santa Fé (crit.).

Buteo magnirostris superciliaris Peters, Bds. World, **1**, p. 239, 1931—Paraguayan and Argentine Chaco.

Buteo magnirostris saturatus Peters, Bds. World, **1**, p. 239, 1931—Bolivia to Tucumán; Bond and de Schauensee, Proc. Acad. Nat. Sci. Phila., **95**, p. 177, 1943—numerous localities, Bolivia (disc.).

Range.—Bolivia (except extreme northern portion) and Paraguay (except extreme southeastern section); southwestern Matto Grosso (teste E. M. Naumburg); western Argentina, west of the Rio Paraná, south to Santa Fé, Córdoba, and La Rioja.

Field Museum Collection.—40: Bolivia (Incachaca, Cochabamba, 2; Aiquile, Cochabamba, 1; Yungas del Palmar, Cochabamba, 2; Buena Vista, Santa Cruz, 2; San Carlos, Santa Cruz, 1; Cercado, Santa Cruz, 1; Rio Surutu, Santa Cruz, 1); Paraguay (195–265 km. west of Puerto Casado, 11; 30 km. west of Puerto Casado, 1; Puerto Casado, 1; Horqueta, 1); Argentina (Concepción, Tucumán, 14; Resistencia, Chaco, 1; Marco Paz, Cordoba, 1).

*Buteo magnirostris pucherani (J. and E. Verreaux).[1]
PUCHERAN'S LARGE-BILLED HAWK.

Asturina pucherani J. and E. Verreaux, Rev. Mag. Zool., (2), **7**, p. 350, 1855—"l'Amérique Méridionale"=Buenos Aires (descr. of young; type in Norwich Museum; cf. Gurney, List Diurn. Bds. Prey, p. 72 [note 5], 1884, and Sclater and Salvin, Exot. Orn., p. 177, 1869); Sclater and Salvin, Proc. Zool. Soc. Lond., 1869, p. 133—part, Buenos Aires, Corrientes, and Paraguay; iidem, l.c., p. 634—Conchitas, Buenos Aires; iidem, Exot. Orn., p. 117, pl. 89 (adult and young), 1869—part, Buenos Aires (crit.); Lee, Ibis, 1873, p. 136—Rio Gato, near Gualeguaychú, Entre Ríos (spec. examined); Sharpe, Cat. Bds. Brit. Mus., **1**, p. 205, 1874 (in part); Durnford, Ibis, 1877, p. 187—Buenos Aires; Barrows, Auk, **1**, p. 30, 1884—Concepción del Uruguay, Entre Ríos; Withington, Ibis, 1888, p. 469—Lomas de Zamora, Buenos Aires; Sclater and Hudson, Arg. Orn., **2**, p. 58, 1889—Argentina.

Astur magnirostris (not *Falco magnirostris* Gmelin) d'Orbigny, Voy. Amér. Mérid., Ois., p. 91, 1835—part, Buenos Aires, Entre Ríos, and Corrientes; Lafresnaye and d'Orbigny, Syn. Av., **1**, in Mag. Zool., **7**, cl. 2, p. 5, 1837—part, Corrientes and Buenos Aires.

Asturina gularis Schlegel, Mus. Pays-Bas, Asturinae, p. 4, 1862—Buenos Aires (type in the Leyden Museum; descr. of adult).

Nisus magnirostris Burmeister, Proc. Zool. Soc. Lond., 1868, p. 633—vicinity of Buenos Aires.

[*Buteo* (*Rupornis*) *magnirostris*] var. *pucherani* Ridgway, Proc. Bost. Soc. N. H., **16**, p. 89, 1873—part, Buenos Aires (crit.).

Asturina nattereri (not of Sclater and Salvin) Holmberg, Act. Acad. Nac. Cienc. Córdoba, **5**, p. 76, 1884—Tandil, Buenos Aires.

Rupornis magnirostris pucherani Hartert and Venturi, Nov. Zool., **16**, p. 239, 1909—part, Barracas al Sud, Buenos Aires, and Roça, Rio Negro; Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 245, 1910—part, Buenos Aires,

[1] *Buteo magnirostris pucherani* (J. and E. Verreaux): Similar to, and agreeing with, *B. m. saturatus* in light tawny tail-bands, but somewhat larger; the throat, with rare exceptions, quite uniform dusky brown with mere trace of light streaking; barring of breast and upper abdomen narrower as well as paler, ochraceous rather than tawny. Wing, 270 (male) to 285 (female).

Sclater and Salvin, on direct comparison of the original specimens—both received by Verreaux—found the type of *A. pucherani* to be a young individual of *A. gularis* Schlegel which was based on an adult from Buenos Aires, and as the pictures in "Exotic Ornithology" tend to support this conclusion, we may after all accept Verreaux's specific term for the large, dark-throated form of the Buenos Aires region. Three adults from Entre Ríos and one from Corrientes are quite identical with topotypes. According to Wetmore, Uruguayan birds are somewhat intermediate to "*nattereri*" (=*magniplumis*), and as the inhabitants of Rio Grande do Sul approach *pucherani* in size as well as in certain details of coloration, it is probable that an unbroken chain of intergrades may exist between the two races. It appears to us that the name *pucherani* should conveniently be restricted to the territory circumscribed above, while the Large-billed Hawk found west of the Rio Paraná more nearly resembles *saturatus*.

Additional material examined.—Argentina: Corrientes, 1; Santa Elena, Entre Ríos, 2; Rio Gato, near Gualeguaychú, Entre Ríos, 1; Tigre, Buenos Aires, 1; Buenos Aires, 5; Colonia Helvetia, 1.

Entre Ríos, and Rio Negro (Roça); Ambrosetti, El Hornero, **1**, p. 116, 1918—San Pedro, Buenos Aires; Swann, Syn. List Accip., p. 56, 1919—part, Argentina; Serié and Smyth, El Hornero, **3**, p. 44, 1923—Santa Elena, Entre Ríos; Pereyra, l.c., **3**, p. 165, 1923—Zelaya, Buenos Aires; Marelli, Mem. Min. Obr. Publ. Buenos Aires for 1922–23, p. 630, 1924—Prov. Buenos Aires; Wetmore, Bull. U. S. Nat. Mus., **133**, p. 111, 1926—part, San Vicente and Rio Negro, Uruguay; Tremoleras, El Hornero, **4**, p. 18, 1927—same localities; Swann, Monog. Bds. Prey, **1**, p. 442, 1930 (monog.; in part).

Rupornis magnirostris nattereri Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 245, 1910—Sierra de la Tinta, Buenos Aires.

Rupornis magnirostris superciliaris (not *Sparvius superciliaris* Vieillot?) Hellmayr, Nov. Zool., **28**, p. 183, 1921—Buenos Aires.

Rupornis magnirostris gularis Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **12**, p. 461 (in text), 1929—Uruguay, Entre Ríos, and Buenos Aires; Steullet and Deautier, Obr. Cinc. Mus. La Plata, p. 433, 1936—Rio Santiago, Buenos Aires.

Buteo magnirostris gularis Peters, Bds. World, **1**, p. 239, 1931 (range).

Range.—Northeastern Argentina, in provinces of Corrientes, Entre Ríos, and Buenos Aires (one record from Roça, Rio Negro), and Uruguay.

Field Museum Collection.—2: Uruguay (Quebrada de los Cuervos, Triente y Tres, 1; Rio Uruguay, southwest of Dolores, Soriano, 1).

***Buteo magnirostris magniplumis** (Bertoni).[1] BERTONI'S LARGE-BILLED HAWK.

Potamolegus superciliaris magniplumis Bertoni, Anal. Cient. Parag., **1**, No. 1, p. 159, Jan., 1901—Mondaíh, eastern Paraguay (descr. of adult; type in coll. of A. de W. Bertoni).

Falco magnirostris (not of Gmelin) Temminck, Nouv. Rec. Pl. Col., livr. 15, pl. 86, 1821—Brazil (young); Wied, Beitr. Naturg. Bras., **3**, (1), p. 102, 1830—eastern Brazil (in part).

[1] *Buteo magnirostris magniplumis* (Bertoni): Similar to *B. m. nattereri* in general coloration and particularly in brownish-gray tail-bands, but decidedly larger, rather darker above, and with the throat, as a rule, less variegated with whitish. Wing, 235 (male) to 255 (female).

Birds from Espirito Santo, Rio de Janeiro, and Santa Catharina agree well and are identical with an adult female from Santa Ana, Misiones, which may reasonably be taken to represent *magniplumis*, based on a bird from the Rio Mondaih, in extreme eastern Paraguay. Specimens from Rio Grande do Sul are intermediate to *B. m. pucherani*, which they resemble in size, blackish pileum, reduction of tawny color on chest, and narrow barring of posterior under parts, but like *magniplumis* they have the light tail-bands brownish gray with mere traces of tawny. Adult females measure: wing, 270–275; tail, 185–190.

Additional material examined.—Brazil: Victoria, Espirito Santo, 3; Rio de Janeiro, 1; Itararé, São Paulo, 1; Mattodentro, São Paulo, 1; Irisanga, São Paulo, 1; Paraná, 1; Santa Catharina (Desterro, Ararangua, Joinville, Blumenau), 29; Engenho do Pará, Matto Grosso, 1; Caicara, Matto Grosso, 2; Camaquam, Rio Grande do Sul, 2.—Argentina: Santa Ana, Misiones, 1.

Nisus magnirostris Burmeister, Syst. Uebers. Th. Bras., **2**, p. 76, 1856—southeastern Brazil.

Asturina magnirostris Schlegel, Mus. Pays-Bas, Asturinae, p. 3, 1862—part, Brazil (transitional plumage).

Astur magnirostris Pelzeln, Orn. Bras., **1**, p. 6, 1867—Rio de Janeiro (Sapitiba, Corcovado), São Paulo (Mattodentro, Ypanemá, Itararé, Irisanga), Paraná (Castro), and Matto Grosso (Engenho do Para, Cuyabá, Caiçara).

Asturina nattereri Sclater and Salvin, Proc. Zool. Soc. Lond., 1869, p. 132—part, São Paulo and Matto Grosso; iidem, Exot. Orn., p. 173, 1869—part, southern Brazil; Reinhardt, Vidensk. Medd. Naturhist. Foren., 1870, p. 69—Minas Geraes; Berlepsch, Journ. Orn., **31**, p. 289, 1873—Blumenau, Santa Catharina; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 208, 1874—Brazil (in part); Ihering, Rev. Mus. Paul., **3**, p. 353, 1899—São Paulo and Piracicaba, São Paulo; idem, l.c., **4**, p. 162, 1900—Cantagallo, Rio de Janeiro; idem, Ann. Est. Rio Grande do Sul, **16**, p. 140, 1899—Mundo Novo, Rio Grande do Sul.

[*Buteo* (*Rupornis*) *magnirostris*] var. *nattereri* Ridgway, Proc. Bost. Soc. N. H., **16**, pp. 87, 88, 1873—part, São Paulo, Matto Grosso, Rio de Janeiro, and Rio das Velhas.

Rupornis nattereri Cabanis, Journ. Orn., **22**, p. 229, 1874—Cantagallo, Rio de Janeiro; Berg, Commun. Mus. Nac. Buenos Aires, **1**, p. 283, 1901—Rio de Janeiro (descr.); Dabbene, Bol. Soc. Physis, **1**, p. 301, 1914—Iguazú, Misiones.

Asturina nattereri saturata? (not *A. saturata* Sclater and Salvin) Berlepsch and Ihering, Zeits. Ges. Orn., **2**, p. 168, 1885—Taquara, Rio Grande do Sul.

Rupornis magnirostris nattereri Allen, Bull. Amer. Mus. N. H., **5**, p. 142, 1893—Chapada, Matto Grosso; Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **22**, No. 3, p. 573, 1906—part, São Paulo; Ihering, Cat. Faun. Braz., **1**, p. 91, 1907—part, São Paulo (Piracicaba, Jaboticabal, Rincão), Paraná (Ourinho), and Paraguay (Puerto Bertoni); Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 245, 1910—part, Misiones and Alto Paraná; idem, Bol. Soc. Physis, **1**, p. 247, 1913—Santa Ana, Misiones; Ménégaux, Rev. Franç. d'Orn., 1918, p. 289—Villa Lutetia, near San Ignacio, Misiones; Swann, Syn. List Accip., p. 56, 1919—Brazil (in part); idem, Syn. Accip., p. 93, 1922—Brazil (in part); Stolzmann, Ann. Zool. Mus. Pol. Hist. Nat., **5**, p. 123, 1926—Marechal Mallet, Fazenda Concordia, Fazenda Durski, Candido de Abreu, Guarapuava, Salto de Ubá, and Salto Guayra, Paraná; Swann, Monog. Bds. Prey, **1**, p. 441, 1930—Brazil (in part).

Potamolegus superciliaris (not *Sparvius superciliaris* Vieillot)[1] Bertoni, Anal. Cient. Parag., **1**, No. 1, p. 158, Jan., 1901—Djavevihrih, Alto Paraná (descr. of young).

[1] *Sparvius superciliaris* Vieillot (Nouv. Dict. Hist. Nat., nouv. éd., **10**, p. 328, 1817—based on "Esparvero pardo ceja blanca" Azara, No. 25) seems to refer to the juvenile plumage of some Large-billed Hawk, but as no less than three races are now known to occur within the territory explored by Azara, its exact identification from the rather ambiguous description (cf. Wetmore, Bull. U. S. Nat. Mus., **133**, p. 112, 1926) becomes an utter impossibility, and the name should be dropped.

Rupornis magnirostris pucherani (not *Asturina pucherani* Verreaux) Bertoni, Faun. Parag., **1**, p. 43, 1914—Alto Paraná, Paraguay.

Rupornis magnirostris superciliaris Bertoni, Anal. Cient. Parag., **1**, No. 1, p. 43, 1914—Alto Paraná, Paraguay.

Rupornis magnirostris magniplumis Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **12**, p. 461 (in text), 1929—southeastern Brazil and Misiones; Naumburg, Bull. Amer. Mus. N. H., **60**, p. 109, 1930—Primavera and Tapirapoan, Matto Grosso; Pinto, Rev. Mus. Paul., **17**, (2), p. 720, 1932—Aquidauana, Matto Grosso; idem, l.c., **20**, p. 51, 1936—Rio das Almas (Jaraguá) and Inhúmas, Goyáz (crit.); Steullet and Deautier, Obr. Cinc. Mus. La Plata, p. 432, 1936 (range).

Buteo magnirostris magniplumis Peters, Bds. World, **1**, p. 239, 1931 (range).

Range.—Southern Brazil, from Espirito Santo, Minas Geraes, Goyáz, and Matto Grosso south to Rio Grande do Sul, Misiones, and the adjacent parts of Paraguay (Alto Paraná).

Field Museum Collection.—14: Brazil (Rio San Miguel, Goyáz, 2; Veadeiros, Goyáz, 2; Nova Roma, Rio Parana, Goyáz, 2; Conceiçao, Matto Grosso, 1; Chapada, Matto Grosso, 2; Piraputanga, Matto Grosso, 1; Joinville, Santa Catharina, 1; Fazenda Morungaba, Paraná, 2); Argentina (Puerto Segundo, Misiones, 1).

***Buteo magnirostris nattereri** (Sclater and Salvin). NATTERER'S LARGE-BILLED HAWK.

Asturina nattereri Sclater and Salvin, Proc. Zool. Soc. Lond., 1869, p. 132—part, vicinity of Bahia, Brazil (type in Salvin-Godman Collection, now in the British Museum, examined); iidem, Exot. Orn., livr. 11, p. 173, pl. 87, 1869—part, Bahia; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 208, 1874—part, spec. c–g, Bahia, Brazil; Nicoll, Ibis, 1904, p. 40—Bahia.

Falco magnirostris (not of Gmelin) Spix, Av. Spec. Nov. Bras., **1**, p. 18, 1824—"in provincia Piauhy, Bahia, etc." (spec. examined); Wied, Beitr. Naturg. Bras., **3**, (1), p. 102, 1830—eastern Brazil (in part).

[*Buteo* (*Rupornis*) *magnirostris*] var. *nattereri* Ridgway, Proc. Bost. Soc. N. H., **16**, p. 88, 1873—part, Bahia.

Rupornis magnirostris nattereri Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **22**, No. 3, p. 573, 1906 (crit.); Lima, Rev. Mus. Paul., **12**, (2), p. 96, 1920—Belmonte, Bahia; Reiser, Denks. Math.-Nat. Kl. Akad. Wiss. Wien, **76**, p. 203, 1923—Bahia and Piauhy (habits); Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **12**, p. 460, 1929—Maranhão (Turyassú, São Bento, São Luiz, Primeira Cruz, Tapera, Miritiba), Piauhy (Ibiapaba; Ilha São Martin, Rio Parnahyba), and Ceará (Juá) (crit.); Swann, Monog. Bds. Prey, **1**, p. 441, 1930—Brazil (in part); Pinto, Rev. Mus. Paul., **19**, p. 101, 1935—Rio Gongogy, Ilha de Madre de Deus, Belmonte, and Bomfim, Bahia (crit.; meas.).

Rupornis nattereri Reiser, Denks. Math.-Nat. Kl. Akad. Wiss. Wien, **76**, p. 89, 1910—Bahia (Serra da Solidade, Barra do Rio Grande, Lagõa do Boqueirão) and Piauhy (Ilha São Martin, Rio Parnahyba).

Buteo magnirostris nattereri Peters, Bds. World, **1**, p. 228, 1931 (range).

Range.—Northeastern Brazil, from Maranhão, Piauhy, and Ceará south to Bahia.[1]

Field Museum Collection.—8: Brazil (Tury-assú, Maranhão, 1; San Benito, Maranhão, 1; Ibiapaba, Piauhy, 1; Quixada, Ceará, 3; Juá, near Iguatu, Ceará, 2).

***Buteo leucorrhous** (Quoy and Gaimard). WHITE-RUMPED HAWK.

Falco leucorrhous Quoy and Gaimard, in Freycinet, Voy. Uranie et Physic., Zool., livr. 3, p. 91, pl. 13, Aug., 1824—"Brésil"=Rio de Janeiro (type in Paris Museum).

Nisus leucorrhous Tschudi, Arch. Naturg., **10**, (1), p. 265, 1844—Peru; idem, Unters. Faun. Peru., Orn., p. 103, 1846—Peru (descr. of young).

Asturina leucorrhoa(us) Kaup, Isis, 1847, col. 199—Brazil (descr.); Bonaparte, Consp. Gen. Av., **1**, p. 30, 1850—Caracas, Venezuela; Schlegel, Mus. Pays-Bas, Asturinae, p. 5, 1862—Brazil (descr.); Sclater and Salvin, Proc. Zool. Soc. Lond., 1869, p. 134—Brazil (Rio de Janeiro), Venezuela, Colombia (Bogotá), and Peru (monog.); Sharpe, Cat. Bds. Brit. Mus., **1**, p. 209, 1874—"Trinidad," Brazil, and Caracas; Sclater and Salvin, Proc. Zool. Soc. Lond., 1875, p. 235—Mérida, Venezuela; iidem, l.c., 1879, p. 540—Concordia and Santa Elena, Colombia; Taczanowski, Orn. Pér., **1**, p. 119, 1884—Peru; Berlepsch and Ihering, Zeits. Ges. Orn., **2**, p. 168, 1885—Arroio Grande, Rio Grande do Sul; Ihering, Ann. Est. Rio Grande do Sul, **16**, p. 140, 1899—Mundo Novo, Rio Grande do Sul.

Astur leucorrhous Pelzeln, Orn. Bras., **1**, p. 7, 1868—vicinity of Rio de Janeiro.

Buteo (Rupornis) leucorrhous Ridgway, Proc. Bost. Soc. N. H., **16**, p. 90, 1873 (monog.).

Rupornis leucorrhoa Allen, Bull. Amer. Mus. N. H., **13**, p. 129, 1900—El Libano, Santa Marta, Colombia; Lillo, Anal. Mus. Nac. Buenos Aires, 8, p. 204, 1902—Cuesta de Malamala and San Pedro, Tucumán; idem, Rev. Letr. Cienc. Soc., **3**, No. 13, p. 62, 1905—same localities; Ihering, Cat. Faun. Braz., **1**, p. 91, 1907—Santa Catharina (Desterro), Minas Geraes (Marianna), and Paraguay (Puerto Bertoni); Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 245, 1910—Tucumán; Bertoni, Faun. Parag., p. 43, 1914—Alto Paraná, Paraguay; Swann, Syn. List Accip., p. 57, 1919 (chars.; range); idem, Auk, **38**, p. 362, 1921—Culata, Montaña Sierra, and Escorial, Mérida, Venezuela; idem, Syn. Accip., p. 94, 1922 (range); Lönnberg and Rendahl, Ark. Zool., **14**, No. 25, p. 41, 1922—Alonguinche (Mojanda), Maspa (below Papallacta), and Piganta (Mojan-

[1] Birds from northern Maranhão, by their somewhat stronger grayish suffusion in the tawny prepectoral area, display a slight tendency toward *magnirostris*, but otherwise agree with the inhabitants of Bahia, Piauhy, and Ceará. Wing, 197–217, (female) 215–228.

Additional material examined.—Maranhão: São Luiz, 1; Miritiba, 5; Tapera, 1; Primeira Cruz, 2.—Piauhy: Ilha São Martin, Rio Parnahyba, 1.—Bahia: Serra da Solidade, 1; Barra, 1; Fazenda da Serra, Rio Grande, 1; Lagõa do Boqueirão, Rio Grande, 1; unspecified, 8.

da), Ecuador (crit.); Chapman, Bull. Amer. Mus. N. H., **55**, p. 232, 1926—El Chiral and above Baeza, Ecuador; Holt, l.c., **57**, p. 283, 1928—Serra do Itatiaya, Rio de Janeiro; Swann, Monog. Bds. Prey, **1**, p. 445, pl. [33], fig. 11 (egg), 1930 (monog.); Steullet and Deautier, Obr. Cinc. Mus. La Plata, p. 437, 1936 (range in Argentina).

Rupornis nigra Bertoni, Anal. Cient. Parag., **1**, No. 1, p. 162, Jan., 1901—Alto Paraná, lat. 25°–27° S., Paraguay (type in coll. of A. de W. Bertoni).

Buteola leucorrhoa Berlepsch and Stolzmann, Proc. Zool. Soc. Lond., 1902, (2), p. 42—Tambo de Aza, Junín, Peru.

Percnohierax leucorrhous Todd and Carriker, Ann. Carnegie Mus., **14**, p. 153, 1922—El Libano (ex Allen).

Buteo leucorrhous Peters, Bds. World, **1**, p. 239, 1931 (range); Dugand, Rev. Acad. Columb. Cienc., Bogotá, **4**, p. 399, 1941—Colombia.

Range.—Locally in Colombia (Concordia, western Andes; El Tambo, Cauca; Santa Elena, central Andes; El Libano, Santa Marta region; "Bogotá"), Ecuador (both sides), Peru, Venezuela (Mérida region; Caracas), Brazil (Rio de Janeiro; Serra do Itatiaya; Santa Catharina; Rio Grande do Sul), Paraguay (Alto Paraná), and Argentina (Cuesta de Malamala and San Pablo, Tucumán).

Field Museum Collection.—7: Colombia (El Tambo, Munchique, Cauca, 3); Ecuador (Mount Mojanda, Pichincha, 2; Baeza, Napo-Pastaza, 1); Venezuela (Mérida, Mérida, 1).

***Buteo brachyurus** Vieillot. SHORT-TAILED HAWK.

Buteo brachyurus Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **4**, p. 477, 1816—no locality given (type, sent by Leblond from Cayenne, in Paris Museum; cf. Pucheran, Rev. Mag. Zool., (2), **2**, p. 86, 1850); Sclater and Salvin, Proc. Zool. Soc. Lond., 1869, p. 600—Tinta, Peru; Salvin, l.c., 1870, p. 215—Calovévora, Veraguas; Ridgway, Bull. Nutt. Orn. Cl., **6**, p. 210, 1881—Palatka, Florida, and Mirador, eastern Mexico (descr.); idem, Proc. U. S. Nat. Mus., **8**, p. 578, 1885—Cozumel Island (descr. of young); Scott, Auk, **6**, p. 244, 1889—Tarpon Springs, Florida (breeding; crit.); Pennock, l.c., **7**, p. 56, 1890—St. Marks, Florida (breeding); Cherrie, l.c., **9**, p. 328, 1892—San José, Costa Rica (Sept. 10, 1888); Bendire, Life Hist. N. Amer. Bds., **1**, p. 246, pl. 8, fig. 7 (egg), 1892—Florida; Richmond, Proc. U. S. Nat. Mus., **16**, p. 522, 1893—Rio Escondido, Nicaragua; Allen, Bull. Amer. Mus. N. H., **5**, p. 142, 1893—Chapada, Matto Grosso; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 71, 1900—Florida, Mexico (Tamaulipas, Alvarado, Jalapa, Tehuantepec City, Tonalá, Cozumel Island), Guatemala, Nicaragua (Escondido River), Costa Rica (San José, Irazú, San Antonio, La Palma), and Panama (Calóbre, Calovévora); Bangs, Proc. New Eng. Zool. Cl., **3**, p. 20, 1902—Sona, Chiriquí; Thayer and Bangs, Bull. Mus. Comp. Zool., **46**, p. 214, 1906—savanna

of Panama; Carriker, Ann. Carnegie Mus., **6**, p. 458, 1910—Azahar de Cartago, Costa Rica; Chapman, Bull. Amer. Mus. N. H., **36**, p. 243, 1917—Quindio Pass, Colombia; Todd and Carriker, Ann. Carnegie Mus., **14**, p. 151, 1922—Bonda and Palenque, Colombia; Hallinan, Auk, **41**, p. 311, 1924—Gatún, Panama; Chapman, Bull. Amer. Mus. N. H., **55**, p. 231, 1926—Ecuador (listed); (?)Zimmer, Field Mus. Nat. Hist., Zool. Ser., **17**, p. 246, 1930—Panao, Huánuco, Peru; Peters, Bds. World, **1**, p. 239, 1931 (range); Griscom, Bull. Mus. Comp. Zool., **72**, p. 314, 1932—Permé, Darien; idem, l.c., **78**, p. 299, 1935—Panama; Dugand, Rev. Acad. Colomb. Cienc., Bogotá, **4**, p. 399, 1941—Colombia.

Buteo melanoleucus (not of Vieillot, 1816) Lesson, Traité d'Orn., livr. 4, p. 82, May, 1830—Cayenne (cf. Pucheran, Rev. Mag. Zool., (2), **2**, p. 124, 1850; crit.).

Falco albifrons Wied, Beitr. Naturg. Bras., **3**, (1), p. 187, 1830—eastern Brazil (type now in the American Museum of Natural History, New York; cf. Allen, Bull. Amer. Mus. N. H., **2**, p. 267, 1889).

Asturina albifrons Kaup, Isis, 1847, col. 200—no locality=Brazil (type in Frankfurt Museum);[1] Bonaparte, Consp. Gen. Av., **1**, p. 31, 1850 (diag.); idem, Rev. Mag. Zool., (2), **2**, p. 489, 1850 (crit.); Sclater, Proc. Zool. Soc. Lond., **27**, p. 368, 1859—Jalapa, Mexico.

Buteo fuliginosus Sclater, Proc. Zool. Soc. Lond., **26**, p. 356, Nov. 9, 1858—State of Tamaulipas, Mexico (descr. of melanistic variety; type in Norwich Museum); idem, Trans. Zool. Soc. Lond., **4**, (6), p. 267, pl. 62, 1858—Tamaulipas, Mexico (descr. and fig. of type); Sclater and Salvin, Ibis, 1860, p. 401—Coban, Guatemala; Gurney, l.c., 1876, pp. 235 (meas. of type), 477–480—Mexico (Tamaulipas, Jalapa), Guatemala (Vera Paz), Venezuela, and Peru (Tinta) (crit.; meas.); Scott, Auk, **5**, p. 185, 1888—Cape Romano, Florida; idem, l.c., **6**, p. 243, 1889 (crit.).

Asturina brachyura Sclater and Salvin, Ibis, 1859, p. 218—Guatemala.

Buteo minutus (Natterer MS.) Pelzeln, Sitzungsber. Akad. Wiss. Wien, **44**, p. 14, 1861—Brazil and Cayenne (type, from Pará, in Vienna Museum examined); idem, Verh. Zool.-Bot. Ges. Wien, **12**, pp. 141, 185, 1862—Cayenne, Pará, and Matto Grosso (soft parts); idem, l.c., **15**, p. 937, 1865—Matto Grosso (melanistic variety); idem, Orn. Bras., **1**, p. 3, 1868—[Villa Bella de] Matto Grosso and Pará, Brazil; Lawrence, Bull. U. S. Nat. Mus., **4**, p. 42, 1876—Tehuantepec City, Mexico.

Buteo albifrons Schlegel, Mus. Pays-Bas, Buteones, p. 10, 1862—Brazil (notes on the types of *F. albifrons* Wied and *Asturina albifrons* Kaup).

Buteola brachyura Layard, Ibis, 1873, p. 394—Nazaré, Pará, Brazil; Taczanowski, Proc. Zool. Soc. Lond., 1874, p. 552—Amable Maria, Peru; Cabanis, Journ. Orn., **22**, p. 229, 1874—Cantagallo, Rio de Janeiro; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 201, 1874 (monog.); Gurney, Ibis, 1876, p. 479—Guatemala, Brazil (Pará, Rio de Janeiro), and Veraguas (meas.); Sclater and Salvin, Proc. Zool. Soc. Lond., 1879, pp. 540, 637—Santa Elena, Colombia, and Tilotilo, Yungas, Bolivia; Sumichrast, La Naturaleza, **5**, p. 236, 1881—Tonalá, Chiapas; Berlepsch and Taczanowski,

[1] Doubtless No. 2682, *Buteola brachyura*, from Brazil, as listed by Hartert (Kat. Vögels Mus. Senckenberg. Naturf. Gesells., p. 176, 1891).

Proc. Zool. Soc. Lond., 1883, p. 574—Chimbo, Ecuador; Taczanowski, Orn. Pér., **1**, p. 118, 1884—Amable Maria, Peru; Gurney, List Diurn. Bds. Prey, p. 146, 1884 (crit.); Berlepsch and Ihering, Zeits. Ges. Orn., **2**, p. 168, 1885—Taquara, Rio Grande do Sul; Salvin, Ibis, 1890, pp. 84, 89—Cozumel Island; Ihering, Ann. Est. Rio Grande do Sul, **16**, p. 140, 1899—Mundo Novo; idem, Rev. Mus. Paul., **3**, p. 353, 1899—Piracicaba, São Paulo; idem, l.c., **4**, p. 162, 1900—Cantagallo, Rio de Janeiro; Berlepsch and Stolzmann, Proc. Zool. Soc. Lond., 1902, (2), p. 42—La Merced, Chanchamayo, Peru; Ihering, Cat. Faun. Braz., **1**, p. 90, 1907—Piracicaba, São Paulo; Berlepsch, Nov. Zool., **15**, p. 291, 1908—Cayenne; Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 244, 1910—Alto Paraná, Paraguay; Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **26**, No. 2, p. 96, 1912—Nazaré, Pará; Bertoni, Anal. Soc. Cient. Arg., **75**, p. 79, 1913—Misiones; Dabbene, Bol. Soc. Physis, **1**, p. 247, 1913—Misiones; idem, l.c., p. 301, 1914—Misiones; Bertoni, Faun. Parag., p. 42, 1914—Alto Paraná, Paraguay; Snethlage, Bol. Mus. Goeldi, **8**, p. 131, 1914 (listed); Chubb, Bds. Brit. Guiana, **1**, p. 236, 1916—British Guiana (ex Quelch); Swann, Syn. List Accip., p. 54, 1919 (chars.; range); idem, Auk, **38**, p. 361, 1921—Escorial, Valle, Montaña Sierra, and Culata, Mérida, Venezuela; idem, Syn. Accip., p. 89, 1922 (chars.; range); Brandt, Auk, **41**, p. 59, pl. 9, 1924—Florida (nesting habits); Swann, Monog. Bds. Prey, **1**, p. 429, pl. [33], fig. 12 (egg), 1930 (monog.); Naumburg, Bull. Amer. Mus. N. H., **60**, p. 107, 1930—Matto Grosso; Griscom, l.c., **64**, p. 155, 1932—Guatemala (listed); Peters, Bull. Mus. Comp. Zool., **71**, p. 311, 1931—Changuinola, Almirante, Panama; Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 431, 1936—Monte Carlo, Misiones; Bent, Bull. U. S. Nat. Mus., **167**, p. 254, 1937 (life hist.; range).

Buteola fuliginosa Ridgway, Bull. Nutt. Orn. Cl., **6**, p. 212, 1881—Mexico (Mirador, Mazatlan, Tehuantepec), Florida (Oyster Bay), and Brazil (Albuquerque) (descr.).

Elanus amauroleucus Bertoni, Anal. Cient. Parag., **1**, No. 1, p. 166, Jan., 1901—banks of the Rio Paraná, lat. 26° and 27° S., Paraguay (type in coll. of A. de W. Bertoni).

Buteo abbreviatus minimus Swann, Syn. List Accip., p. 51, Nov. 7, 1919—Miritiba, Maranhão, Brazil (type in coll. of H. K. Swann, now in the Museum of Comparative Zoology, Cambridge, Mass.); idem, Auk, **38**, p. 360 (in text), 1921 (crit.).

Range.—Breeds in southern Florida, possibly in eastern Mexico and Central America and locally in South America, where it occurs as far south as Chimbo, western Ecuador, and east of the Andes in eastern Peru, Bolivia, and Brazil south to Misiones (Monte Carlo), Argentina, and Paraguay (Alto Paraná).[1]

Field Museum Collection.—20: Florida (Miami, 1; Charlotte Harbor, 1; Chatham Bay, 1); Mexico (Tancitaro, Michoacan, 1;

[1] *Additional specimens examined.*—Florida, 3.—Mexico: Jalapa, 1.—Guatemala: Coban, 1.—Panama: Calovévora, 1.—French Guiana: Cayenne, 3.—Brazil: Pará, 1; Villa Bella de Matto Grosso, 1; Ypanemá, São Paulo, 1; Joinville, Santa Catharina, 2.

Tampico, Tamaulipas, 1); Colombia (El Tambo, Munchique, Cauca, 7); Ecuador (Puente de Chimbo, Guayas, 1; Pacto, Pichincha, 1; Rio Guallabamba, Pichincha, 1); Peru (Panao Mountains, Huánuco, 1;[1] San Ramón, Junín, 1); Brazil (Lago do Baptista, Amazonas, 1; Miritiba, 1); Bolivia (Rio Surutu, Santa Cruz, 1).

***Buteo fuscescens fuscescens** (Vieillot). BUZZARD EAGLE.

Spizaëtus fuscescens Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **32**, p. 55, 1819—based on "Aguila parda" Azara, No. 9, between 31° and 34° Lat. S., viz., eastern Argentina (Corrientes or Entre Ríos) (descr. of young).

Spizaëtus melanoleucus Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **32**, p. 57, 1819—based on "Aguila obscura y blanca" Azara, No. 8, Paraguay (descr. of adult).

Falco aguia Temminck, Nouv. Rec. Pl. Col., livr. 51, pl. "301" (=302), Oct. 23, 1824—Brazil (type in Paris Museum).

Haliaëtus melanoleucus d'Orbigny, Voy. Amér. Mérid., Ois., p. 76, 1835—part, eastern Argentina; Lafresnaye and d'Orbigny, Syn. Av., **1**, in Mag. Zool., **7**, cl. 2, p. 3, 1837—part, Argentina and Bolivia; Burmeister, Syst. Uebers. Th. Bras., **2**, p. 54, 1855—part, Brazil; idem, Reise La Plata St., **2**, p. 435, 1861—part, Paraná, Entre Ríos.

Asturina melanoleuca Schlegel, Mus. Pays-Bas, Asturinae, p. 5, 1862—part, spec. Nos. 1–6, Brazil and Paraguay.

Geranoaetus melanoleucus Pelzeln, Verh. Zool. Bot. Ges. Wien, **13**, pp. 592, 631, 1863—part, Brazil (Murungaba, Itararé) (soft parts); idem, Orn. Bras., **1**, p. 4, 1868—Itararé and Murungaba, São Paulo; Lee, Ibis, 1873, p. 136—Rio Gato, near Gualeguaychú, Entre Ríos; Gibson, Ibis, 1879, p. 409—Cape San Antonio, Buenos Aires; Dalgleish, Proc. Roy. Phys. Soc. Edin., **6**, p. 239, pl. 7, fig. 3 (egg), 1881—Est. de la Tala, Durazno, Uruguay; (?)Doering, in Roca, Inf. Ofic. Exp. Rio Negro, Zool., p. 51, 1881—part, Sierras del Azúl and de Currumalán, Buenos Aires; Barrows, Auk, **1**, p. 110, 1884—Concepción del Uruguay, Entre Ríos, and (?)Sierra de la Ventana, Buenos Aires; Sclater and Hudson, Arg. Orn., **2**, p. 64, 1889—Argentina (in part); Kerr, Ibis, 1892, p. 143—lower Pilcomayo; Aplin, Ibis, 1894, p. 194—Uruguay; Kerr, Ibis, 1901, p. 230—Paraguayan Chaco; Ihering, Cat. Faun. Braz., **1**, p. 89, 1907—part, São Paulo and Paraguay; Hartert and Venturi, Nov. Zool., **16**, p. 239, 1909—part, Ceres, Santa Fé; Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, pp. 243, 414, 1910—part, Mocoví, Santa Fé, and Cape San Antonio, Buenos Aires; Grant, Ibis, 1911, p. 332—Los Yngleses, Ajó; Bertoni, Faun. Parag., p. 42, 1914—Paraguay; Swann, Syn. List Accip., p. 40, 1919 (in part); Gibson, Ibis, 1919, p. 508, 1920, p. 96—Cape San Antonio, Buenos Aires; Tremoleras, El Hornero, **2**, p. 17, 1920—Florida and Minas, Uruguay; Serié and Smyth, l.c., **3**, p. 44, 1923—Santa Elena, Entre Ríos; Ménégaux, Rev. Franç. d'Orn., 1925, p. 279—Tataral del Bracho and Tataral de la Palisa, near Icaño, Santiago del Estero.

[1] Doubtfully identified with the present species.

Buteo melanoleucus Sharpe, Cat. Bds. Brit. Mus., **1**, p. 168, 1874—part, southern Brazil; (?)Holmberg, Act. Acad. Nac. Cienc. Córdoba, **5**, p. 75, 1884—Sierra del Tandíl and de la Tinta, Buenos Aires; Ihering, Ann. Est. Rio Grande do Sul, **16**, p. 139, 1899—Pedras Brancas, Rio Grande do Sul; idem, Rev. Mus. Paul., **3**, p. 352, 1899—São Paulo.

Geranoaëtus melanoleucus melanoleucus Swann, Syn. Accip., p. 67, 1922 (range); idem, Monog. Bds. Prey, **1**, p. 345, 1926 (monog.); Laubmann, Wiss. Erg. Deuts. Gran Chaco Exp., Vögel, p. 109, 1930—Mission Tacaaglé (Formosa), Gálvez (near Rosario, Santa Fé), and Rio de Oro (Chaco) (crit.); Peters, Bds. World, **1**, p. 227, 1931 (range); Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 413, 1936—Girardet, Santiago del Estero (crit.; range).

Geranoaëtus melanoleucus australis (not of Swann) Marelli, Mem. Min. Obr. Publ. for 1922–23, p. 629, 1924—Cape San Antonio, Buenos Aires.

Range.—Southeastern Brazil, from São Paulo (Murungaba, Itararé) to Rio Grande do Sul; Uruguay; Paraguay (including the Chaco); eastern Argentina, from Formosa and Misiones south to Santa Fé, Entre Ríos, and Buenos Aires.[1]

Field Museum Collection.—3: Paraguay, Chaco (190 km. west of Puerto Casado, 2);[2] Uruguay (Quebrada de los Cuervos, Triente y Tres, 1).

***Buteo fuscescens australis** (Swann).[3] WESTERN BUZZARD EAGLE.

Geranoaetus melanoleucus australis Swann, Syn. Accip., p. 67, Jan. 2, 1922—Valle del Lago Blanco, Chubut (type in British Museum); Giacomelli, El Hornero, **3**, p. 77, 1923—La Rioja; Peters, Bull. Mus. Comp. Zool., **65**, p. 305, 1923—thirty miles south of Maquinchao, Rio Negro; Swann, Monog. Bds. Prey, **1**, p. 347, 1926 (monog.); Zimmer, Field Mus. Nat.

[1] The exact limits of the range beyond Santa Fé remain to be determined by adequate material. According to Steullet and Deautier, it comprises the northern parts of the Province of Buenos Aires (Cape San Antonio) and probably extends into the plains of Córdoba and Santiago del Estero. Like one from Paraguay and others from Santa Fé, the few examples seen from Brazil (Murungaba, São Paulo) have a practically immaculate belly. No material seen from Province of Buenos Aires. Dabbene found two adults from Lavalle (Cape San Antonio) to pertain to the nominate race, while one from Guaminí (extreme southwestern section of Province of Buenos Aires), as recorded by Steullet and Deautier, is said to be *australis*.

[2] One of these specimens has the belly immaculate, the other shows a tinge of barring as in the race *australis*.

[3] *Buteo fuscescens australis* (Swann) is only distinguishable from the nominate race by having the belly more or less distinctly barred with blackish. While these markings vary somewhat individually, I have never seen a Patagonian or Andean individual with the belly as immaculately white as is the case in birds from southern Brazil and Santa Fé. I cannot distinguish the supposedly smaller northern form (*meridensis*). Two adult males from the Cordillera of Mérida have wings of 475 and 483; two adult females measure 520 and 530 mm., being thus fully as large as southern individuals. Twenty additional specimens, including eight from central Chile (Cuesta lo Prado, Santiago, Papudo, Batuco), examined.

Hist., Zool. Ser., **17**, p. 246, 1930—Cullcuí, Marañón River, Peru (crit.); Peters, Bds. World, **1**, p. 227, 1931 (range); Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **19**, p. 278, 1932—Chile (Rio Ñirehuau, Llanquihue; Limache, Valparaiso); Marelli, El Hornero, **5**, p. 194, 1933—Fortín Chaco and Bahia Blanca, Buenos Aires; Barros, Rev. Chil. Hist. Nat., **38**, p. 140, 1934—El Romeral, Penco, Chile; Reynolds, l.c., **5**, p. 347, 1934—Isla de los Conejos, Tierra del Fuego; idem, Ibis, 1935, p. 78—Wollaston, Freycinet, Hermit, and Bayly Islands, Cape Horn; Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 414, 1936—Salta (Quebrada del Zorro, Rosario), Neuquén (Nahuel Huapi), Rio Negro (Pichy Limay), Chubut (Rio Deseado, Choiquenilahue, Colonia), and Santa Cruz (Cerro Dorotea, Bahía del Fondo) (crit.; range); Housse, Ann. Sci. Nat. Paris, (10), **20**, p. 93, 1937—Chile (range; habits).

Haliaetus melanoleucus (not *Buteo melanoleucus* Vieillot) d'Orbigny, Voy. Amér. Mérid., Ois., p. 76, 1835—part, Chile and Patagonia (=Carmen de Patagones, Buenos Aires); Lafresnaye and d'Orbigny, Syn. Av., **1**, in Mag. Zool., **7**, cl. 2, p. 177, 1837—part, Chile and Patagonia; Burmeister, Syst. Uebers. Th. Bras., **2**, p. 54, 1855—part, Chile (descr.); idem, Reise La Plata St., **2**, p. 435, 1861—part, Tucumán and (?)Rio Cuarto, Córdoba; C. Burmeister, Anal. Mus. Nac. Buenos Aires, **3**, p. 315, 1889—Rios Chico and Senguer, Chubut.

Haliaetus aguia (not *Falco aguia* Temminck) Fraser, Proc. Zool. Soc. Lond., **11**, p. 108, 1843—woods and mountainous parts of Chile (habits); Yarrell, l.c., **15**, p. 52, 1847—Chile (eggs); Bibra, Denks. Math.-Naturw. Kl. Akad. Wiss. Wien, **5**, (2), p. 128, 1853—near Valparaiso, Chile.

Buteo aguya Tschudi, Arch. Naturg., **10**, (1), p. 264, 1844—Peru; idem, Unters. Faun. Peru., Orn., p. 89, 1846—Hacienda Pacchapata, Vitoc, Peru.

Pontoaetus melanoleucus Des Murs, in Gay, Hist. Fís. Pol. Chile, Zool., **1**, p. 221, 1847—Chile; Boeck, Naumannia, 1855, p. 497—Valdivia, Chile; Cassin, in Gilliss, U. S. Astr. Exp., **2**, p. 175, 1855—mountains of Chile; Germain, Proc. Bost. Soc. N. H., **7**, p. 309, 1861—Santiago, Chile (nesting habits); Philippi, Anal. Univ. Chile, **31**, p. 244, 1868—Chile; Lataste, Extr. Proc.-Verb. Séances Soc. Linn. Bordeaux, 1923, p. 167—Cerro de San Cristóbal, Chile.

Asturina melanoleuca Schlegel, Mus. Pays-Bas, Asturinae, p. 5, 1862—part, No. 7, Quito, Ecuador.

Geranoaetus melanoleucus Sclater, Proc. Zool. Soc. Lond., **23**, p. 134, 1855—Bogotá; Pelzeln, Verh. Zool. Bot. Ges. Wien, **13**, pp. 592, 631, 1863—part, Chile; idem, Reise Novara, Zool., **1**, Vögel, p. 7, 1865—Chile (crit.); Sclater, Proc. Zool. Soc. Lond., 1867, pp. 329, 338—Chile; idem and Salvin, l.c., 1869, p. 155—Tungasuca, Peru; iidem, Ibis, 1869, p. 284—Cape Negro, Str. of Magellan; Hudson, Proc. Zool. Soc. Lond., 1872, pp. 536, 539—Rio Negro; Ridgway, Bull. U. S. Geol. Geogr. Surv. Terr., **2**, No. 2, p. 131, 1876—part, Chile (Santiago) and Colombia (Bogotá) (monog.); Reed, Anal. Univ. Chile, **49**, p. 558, 1877—Baños de Cauquenes, Colchagua, Chile; Durnford, Ibis, 1877, p. 38—Chubut Valley (habits); idem, Ibis, 1878, p. 397—Tambo Point, Chubut; Sclater and Salvin, Proc. Zool. Soc. Lond., 1878, p. 434—Elizabeth Island, Straits of Magellan;

iidem, l.c., 1879, p. 540—Antioquia, Colombia; Doering, in Roca, Inf. Ofic. Exp. Rio Negro, Zool., p. 51, 1881—part, Valley of the Rio Negro; Taczanowski, Orn. Pér., **3**, p. 124, 1884—Peru (Lima, Ayacucho, Chanchamayo, Pumamarca, Nancho, Tumbez, Tambillo, Cutervo, Chachapoyas); Sclater and Hudson, Arg. Orn., **2**, p. 64, 1889 (in part); Ridgway, Proc. U. S. Nat. Mus., **12**, "1889," p. 136, 1890—Elizabeth Island, Straits of Magellan; Frenzel, Journ. Orn., **39**, p. 114, 1891—sierras of Córdoba; Berlepsch and Stolzmann, Proc. Zool. Soc. Lond., 1892, p. 388—Lima, Peru; Koslowsky, Rev. Mus. La Plata, **6**, p. 285, 1895—Chilecito, La Rioja; Reed, Anal. Univ. Chile, **93**, p. 205, 1896—Chile; Schalow, Zool. Jahrb. (Syst.), Suppl., **4**, p. 695, 1898—Coquimbo (Ovalle, La Serena) and Tierra del Fuego (Cape Espirito Santo); Salvadori and Festa, Boll. Mus. Zool. Torino, **15**, No. 368, p. 30, 1900—La Concepción (Chota), Chaupi, and Cuenca, Ecuador; Salvadori, Ann. Mus. Civ. Stor. Nat. Genova, **40**, p. 614, 1900—Santa Cruz, Patagonia; Albert, Anal. Univ. Chile, **108**, p. 273, 1901—Cordilleras of Chile and Magallanes (descr.); Goodfellow, Ibis, 1902, p. 222—Santa Carolina marshes, near Quito, Ecuador; Lillo, Anal. Mus. Nac. Buenos Aires, **8**, p. 204, 1902—Taff Viejo and Concepción, Tucumán; Dabbene, l.c., p. 355, 1902—Tierra del Fuego; Berlepsch and Stolzmann, Proc. Zool. Soc. Lond., 1902, (2), p. 42—Maraynioc, Peru; Bruch, Rev. Mus. La Plata, **11**, p. 251, 1904—Orán, Salta; Lillo, Rev. Letr. Cienc. Soc., **3**, No. 13, p. 62, 1905—Taff Viejo and Concepción, Tucumán; Crawshay, Bds. Tierra del Fuego, p. 15, col. pl., 1907—Rio McClelland Settlement, Tierra del Fuego; Hartert and Venturi, Nov. Zool., **16**, p. 239, 1909—part, Tucumán; Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 243, 1910 (in part); Reed, Av. Prov. Mendoza, p. 21, 1916—Precordillera of Mendoza; Sanzin, El Hornero, **1**, p. 149, 1918—Cordillera of Mendoza; Swann, Syn. List Accip., p. 40, 1919 (in part); Barros, Rev. Chil. Hist. Nat., **24**, p. 48, 1920—Nilahue, Curicó, Chile; idem, l.c., **25**, p. 176, 1921—Los Andes and Valle de los Leones, Aconcagua, Chile; Swann, Auk, **38**, p. 359, 1921—Culata, Escorial, Páramo Morro, and Nevados, Mérida, Venezuela (crit.); Hellmayr, Nov. Zool., **28**, p. 177, 1921—Patagonia; Lönnberg and Rendahl, Ark. Zool., **14**, No. 25, p. 36, 1922—La Carolina, Pichincha, Tucubamba (south of Quito), Chaupicruz, Mount Corazón, San Bartolo, and Cotocallo, Ecuador; Barros, Rev. Chil. Hist. Nat., **28**, p. 32, 1924—Cerro de San Bernardo, Santiago; Housse, l.c., **29**, p. 141, 1925—San Bernardo, Santiago; Reed, l.c., p. 189, 1925—Doñihue, O'Higgins, Chile; Wetmore, Univ. Calif. Pub. Zool., **24**, p. 423, 1926—Huanuluan, Rio Negro (crit.); idem, Bull. U. S. Nat. Mus., **133**, p. 111, 1926—near City of Mendoza and above Taff Viejo, Tucumán; Jaffuel and Pirión, Rev. Chil. Hist. Nat., **31**, p. 103, 1927—Marga-Marga Valley, Valparaiso, Chile; Budin, El Hornero, **4**, p. 406, 1931—Sierras del Zenta, Jujuy; Castellanos, l.c., **5**, p. 9, 1932—Valle de los Reartes, Córdoba; Dugand, Rev. Acad. Colomb. Cienc., Bogotá, **4**, p. 399, 1941—Colombia.

Geranoaëtus aguia Taczanowski, Proc. Zool. Soc. Lond., 1874, p. 550—Amable Maria, Peru; idem, l.c., 1877, p. 745—Tumbez, Peru.

Buteo melanoleucus Sharpe, Cat. Bds. Brit. Mus., **1**, p. 168, 1874—part, Rio Negro and Chile; Oustalet, Miss. Sci. Cap Horn, **6**, p. B.35, 1891—Santa Cruz, Salinas, and Punta Delgada, Patagonia; Hartert, Nov. Zool., **5**,

p. 501, 1898—Paramba and Ibarra, Ecuador; Gosse, in Fitz Gerald, The Highest Andes, p. 343, 1899—Puente del Inca, Mendoza; Scott and Sharpe, Rep. Univ. Princet. Exp. Patag., **2**, Orn., p. 623, 1915—Holliday's Ranch and Coy Inlet, Santa Cruz; Chubb, Ibis, 1919, p. 281—Sinche, Guaranda, Ecuador; Chapman, Bull. Amer. Mus. N. H., **55**, p. 226, 1926—Huigra and near Quito, Ecuador; Berlioz, Bull. Mus. Hist. Nat., Paris, (2), **4**, p. 236, 1932—Cerro Guamaní, Ecuador.

Spiziastur melanoleucus (errore) Chapman, Bull. U. S. Nat. Mus., **117**, p. 60, 1921—Tungasuca, Peru (ex Sclater and Salvin, Proc. Zool. Soc. Lond., 1869, p. 155).

Geranoaetus melanoleucus meridensis Swann, Syn. Accip., Part 2, p. 68, Jan. 2, 1922—Nevados, Mérida, Venezuela (type in coll. of H. K. Swann, now in Museum of Comparative Zoology, Cambridge, Mass.); idem, Monog. Bds. Prey, **1**, p. 348, 1926—Venezuela to Ecuador (monog.); Peters, Bds. World, **1**, p. 227, 1931 (range).

Buteo melanoleucus australis Bond and de Schauensee, Proc. Acad. Nat. Sci. Phila., **95**, p. 176, 1943—Padilla and Tutimayo, Bolivia.

Geranoaetus melanoleucos meridensis Lehmann, Rev. Univ. Cauca, **6**, pl., p. 88, 1945—Purace and Quintana, Cauca, Colombia.

Range.—Temperate zone of western and southern South America, from the Andes of extreme western Venezuela (Cordillera of Mérida) and Colombia through Ecuador, Peru, western Bolivia, western Argentina, and Chile south to Tierra del Fuego, extending in Patagonia north to the southern confines of Buenos Aires Province.

Field Museum Collection.—13: Colombia, Cauca (Purace, 2; Popayán, 1); Ecuador (Llanganate, Tunguragua, 1; Valle Guayllabamba, Pichincha, 1; Volcan Cotopaxi, 1; Cayambe, Pichincha, 2; Bocas del Itulcache, Napo Pastaza, 1); Peru (Cullcui, Rio Marañón, Huánuco, 1); Argentina (Aconquija, Tucumán, 1); Chile (Hacienda Limache, Aconcagua, 1; Rio Nirehuau, Aysen, 1).

Buteo albicaudatus albicaudatus Vieillot. WHITE-TAILED HAWK.

Buteo albicaudatus Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **4**, p. 477, 1816—"l'Amérique méridionale";[1] idem, Tabl. Enc. Méth., Orn., livr. 93, p. 1223, 1823; Pucheran, Rev. Mag. Zool., (2), **2**, p. 87, 1850 (crit.; type not in Paris Museum); Gurney, Ibis, 1876, p. 71 (crit.); Durnford, Ibis, 1877, p. 187—Province of Buenos Aires; Berlepsch, Journ. Orn., **35**, p. 27, 1887—Lambaré, Paraguay; Withington, Ibis, 1888, p. 469—Lomas de Zamora, Buenos Aires; Sclater and Hudson, Arg. Orn., **2**, p. 61, 1889—Argentina (habits); Frenzel, Journ. Orn., **39**, p. 114, 1891—Córdoba; Allen, Bull. Amer. Mus. N. H., **5**, p. 142, 1893—Chapada, Matto Grosso (plumages); Hartert and Venturi, Nov. Zool., **16**, p. 239, 1909—Mocoví

[1] Rio de Janeiro suggested as type locality by Berlepsch (Nov. Zool., **15**, p. 291, 1908).

and Ceres, Santa Fé; Gibson, Ibis, 1919, p. 507—Cape San Antonio, Buenos Aires.

Spizaëtus leucurus Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **32**, p. 58, 1819—based on "Aguila coliblanca" Azara, No. 10, Paraguay (not farther south than 29° Lat. S.).

Falco pterocles Temminck, Nouv. Rec. Pl. Col., livr. 10, pls. 56 (adult), 139 (young), May, 1821—Brazil (type in Paris Museum); Lesson, Man. d'Orn., **1**, p. 103, 1828—Brazil.

Buteo albicauda Lesson, Traité d'Orn., livr. 2, p. 81, pl. 15, fig. 2, May, 1830—Brazil;[1] Pucheran, Rev. Mag. Zool., (2), **2**, p. 214, 1850 (crit.).

Buteo pterocles Lesson, Traité d'Orn., livr. 1, p. 80, Feb., 1830—Brazil (Temminck's type, collected by A. de Saint-Hilaire, in Paris Museum); Cabanis, in Tschudi, Faun. Peru., Orn., p. 92 (note), 1846—São Paulo (descr. of dusky variety); Kaup, Isis, 1847, col. 328—Brazil (crit.); Burmeister, Syst. Uebers. Th. Bras., **2**, p. 49, 1855—Brazil; Schlegel, Mus. Pays-Bas, Buteones, p. 13, 1862—part, Nos. 2–4, Brazil; Pelzeln, Verh. Zool. Bot. Ges. Wien, **12**, pp. 142, 185, 1862—part, São Paulo (Goyão, near Mugy das Cruzes; Ypanemá; São Paulo; Delgado; Murungaba; Irisanga; Rio Paraná) and Matto Grosso (Rio das Flechas, [Villa Bella de] Matto Grosso); idem, l.c., **15**, p. 937, 1865—Itararé and Rio Paraná (São Paulo), and Rio das Flechas (Matto Grosso) (melanism); idem, Reise Novara, Zool., **1**, Vögel, pp. 16, 19, 1865—same localities (melanism); idem, Orn. Bras., **1**, p. 3, 1868—part, São Paulo and Matto Grosso localities (as above); Reinhardt, Vidensk. Medd. Naturhist. Foren., 1870, p. 72—Goyáz (Capãosinho) and Minas Geraes (Ribeirão da Tolda, Lagõa Santa); Durnford, Ibis, 1876, p. 161—near Chirilcay, Buenos Aires; Doering, in Roca, Inf. Ofic. Exp. Rio Negro, Zool., p. 51, 1881—Valley of the Rio Negro (near Choele-Choel, Chinchinal, etc.); White, Proc. Zool. Soc. Lond., 1882, p. 622—Monte Grande, Buenos Aires; Barrows, Auk, **1**, p. 109, 1884—Arroyo Gualeguaychú, Entre Ríos.

Hypomorphnus leucurus Lafresnaye, Rev. Mag. Zool., (2), **2**, p. 388, 1849 (in part).

Buteo (Craxirex) albicaudatus Ridgway, Proc. Acad. Nat. Sci. Phila., 1875, p. 98 (in part).

Tachytriorchis albicaudatus Sharpe, Cat. Bds. Brit. Mus., **1**, p. 162, 1874—part, eastern and central Brazil; Ihering, Rev. Mus. Paul., **3**, p. 352, 1899—São Paulo; idem, Cat. Faun. Braz., **1**, p. 89, 1907—São Paulo (Avanhandava) and Rio Grande do Sul (São Lourenço); Lillo, Anal. Mus. Nac. Buenos Aires, **8**, p. 203, 1902—Rio Salí and Cuesta de Malamala, Tucumán; idem, Rev. Letr. Cienc. Soc., **3**, No. 13, p. 62, 1905—same localities; Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 243, 1910 (range in Argentina); Bertoni, Faun. Parag., p. 43, 1914—Alto Paraná, Paraguay; Scott and Sharpe, Rep. Princet. Univ. Exp. Patag., **2**, Orn., p. 616, 1915—Rio Negro, Patagonia; Arribálzaga, El Hornero, **2**,

[1] While Lesson's description ("tête roussâtre, flammée de brun; poitrine blanchâtre, flammée de roux; ventre et cuisses d'un roux vif") is altogether faulty, the figure unquestionably represents the adult stage of the present species, as has been justly remarked by Pucheran.

p. 92, 1920—Chaco; Marelli, Mem. Min. Obr. Publ. for 1922–23, p. 629, 1924—Prov. Buenos Aires; Wilson, El Hornero, **3**, p. 356, 1926—Venado Tuerto, Santa Fé; Bertoni, l.c., p. 398, 1926—Puerto Bertoni, Paraguay; Zotta, l.c., **4**, p. 424, 1931—Martín Coronado, Buenos Aires.

Buteo hypospodius (not of Gurney) Ihering, Cat. Faun. Braz., **1**, p. 89, 1907—part, Brazil; Swann, Syn. List Accip., p. 51, 1919—part, Brazil; idem, Syn. Accip., p. 84, 1922—part, Brazil.

Buteo albicaudatus albicaudatus Swann, Syn. List Accip., p. 52, 1919—"Chile" and Argentina; idem, Syn. Accip., p. 86, 1922—Bahia to Paraguay, Uruguay, Argentina, and "Chile"; Stresemann, Journ. Orn., **73**, pp. 312, 317, 318, 1925 (crit.; meas.; range); Swann, Monog. Bds. Prey, **1**, p. 417, 1928 (monog.; excl. of Chile); Naumburg, Bull. Amer. Mus. N. H., **60**, p. 106, 1930—Matto Grosso; Laubmann, Wiss. Erg. Deuts. Gran Chaco Exp., Vögel, p. 108, 1930—Mission Tacaaglé and Yuncá Viejo, Formosa (crit.); Peters, Bds. World, **1**, p. 229, 1931 (range); Laubmann, Verh. Orn. Ges. Bay., **20**, p. 294, 1934—Estancia La Geraldina, Santa Fé; Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 427, 1936—Girardet, Santiago del Estero (crit.; range); Bond and de Schauensee, Proc. Acad. Nat. Sci. Phila., **95**, p. 176, 1943—Padilla, Bolivia.

[*Buteo albicaudatus*] mut. *aethiops* (not *Buteo* (*Asturina*) *aethiops* Philippi) Stresemann, Journ. Orn., **72**, p. 442 (footnote), 1924—São Paulo, Brazil (descr. of the brownish black mutation).

Range.—Southern Brazil, from Matto Grosso, Goyáz, and Bahia south to Rio Grande do Sul; eastern Bolivia; Paraguay; Uruguay; Argentina from Tucumán, Santiago del Estero, and Formosa south through Santa Fé, Córdoba, Entre Ríos, and Buenos Aires to the Rio Negro.[1]

Field Museum Collection.—8: Bolivia, Santa Cruz (Montero, 1; Warnes, 1); Paraguay, Chaco (195–265 km. west of Puerto Casado, 6).

[1] Birds from Argentina agree well with those from Brazil. Characteristic of the nominate race are the rather large size and the very dark, fuscous to blackish coloration of the head, mantle, and wings. Occasional individuals such as an adult male from Itararé, São Paulo, and another from Villa Bella de Matto Grosso, however, are not nearly so dark, and by a grayish (or slaty) tinge to the upper plumage betray a certain tendency toward the northern form (*colonus*). The throat is generally wholly blackish, but in the Matto Grosso bird it is gray mixed with white, and in the Itararé specimen entirely white as in many Texan examples of Sennett's Hawk. Melanistic individuals (mut. *aethiops* Stresemann) are not infrequent in Brazil, and a male secured by Natterer on the Rio Paraná, São Paulo, on May 7, 1823—described by Pelzeln in 1865—save for lacking the rufous touch on the scapulars and the whitish bars on thighs and middle abdomen, in its uniform neutral gray color is an exact duplicate of the type of *B. hypospodius*. The male from Villa Bella de Matto Grosso is hardly larger than *B. a. colonus*, of northern South America.

Wing measurements.—Adult males: Itararé, 410, 430; Rio Paraná, São Paulo, 410; Rio das Fleches, Matto Grosso, 410; Villa Bella, Matto Grosso, 400; Mocoví, Santa Fé, 425.—Adult females: São Paulo (Ypanemá, Murungaba, Itararé, Goyãz), 440, 445, 455, 460; Tapia, Tucumán, 445; Tacaaglé, Formosa, 445.

Twenty specimens examined.

***Buteo albicaudatus colonus** Berlepsch.[1] GUIANAN WHITE-TAILED HAWK.

Buteo albicaudatus colonus Berlepsch, Journ. Orn., **40**, p. 91, 1892—St. Christoffle, Curaçao Island (descr. of melanistic young; type in coll. of H. von Berlepsch, now in Frankfort Museum, examined); Hartert, Ibis, 1893, pp. 304, 321, 332—Aruba, Curaçao, and Bonaire (crit.); idem, Nov. Zool., **9**, p. 304, 1902—same localities; Cory, Field Mus. Nat. Hist., Orn. Ser., **1**, pp. 198, 205, 210, 253, 1909—same localities; Swann, Syn. List Accip., p. 53, 1919—same localities; idem, Syn. Accip., p. 87, 1922—same localities; Stresemann, Journ. Orn., **73**, pp. 317, 318, 1925—Guiana to Venezuela, Trinidad, Dutch West Indies, and eastern Colombia (crit.; meas.); Peters, Bds. World, **1**, p. 228, 1931 (range); Roberts, Trop. Agric., **11**, p. 89, 1934—Trinidad; Belcher and Smooker, Ibis, 1934, p. 591—Mount Hope, Trinidad (nest and eggs); Brodkorb, Occ. Pap. Mus. Zool. Univ. Mich., **349**, p. 6, 1937—Arary, Marajó; Gilliard, Bull. Amer. Mus. N. H., **77**, p. 458, 1941—Mount Auyan-Tepui, Venezuela; Lehmann, Rev. Univ. Cauca, **6**, p. 99, 1945—part, Venezuela (disc.).

Buteo pterocles (not *Falco pterocles* Temminck) Cabanis, in Schomburgk, Reisen Brit. Guiana, **3**, "1848," p. 739, 1849—savanna of British Guiana; Schlegel, Mus. Pays-Bas, Buteones, p. 13, 1862—part, No. 1, Surinam; Pelzeln, Verh. Zool. Bot. Ges. Wien, **12**, pp. 142, 185, 1862—part, Forte do Rio Branco; idem, Orn. Bras., **1**, p. 3, 1868—part, Forte do Rio Branco, Brazil.

Tachytriorchis albicaudatus (not *Buteo albicaudatus* Vieillot) Sharpe, Cat. Bds. Brit. Mus., **1**, p. 162, 1874—part, spec. e, g, Caracas and Demerara (spec. examined); Snethlage, Bol. Mus. Goeldi, **8**, p. 130, 1914—Marajó, Brazil; Chubb, Bds. Brit. Guiana, **1**, p. 231, 1916—Roraima; Young, Ibis, 1929, p. 7—coastland of British Guiana.

Buteo (*Craxirex*) *albicaudatus* Ridgway, Proc. Acad. Nat. Sci. Phila., 1875, p. 98 (monog.; in part).

Buteo hypospodius Gurney, Ibis, 1876, p. 73—part, River Amazonas; Ihering, Cat. Faun. Braz., **1**, p. 89, 1907—part, Amazonas; Swann, Syn. List

[1] *Buteo albicaudatus colonus* Berlepsch: Similar to the nominate race, but smaller, and coloration of head, mantle, and wings in normal plumage decidedly lighter, neutral gray to dark neutral gray. Wing, (males) 375–400, (females) 425–440 (in one Quonga specimen 452).

We have, of course, not been able to compare adult birds from Curaçao, which do not exist in collections, but as there is no material difference between specimens from Marajó, British Guiana, Margarita Island, and Mérida, the probability of there being a local insular form on the Dutch West Indian islands seems hardly likely. The color of the throat varies as in the other races. It is wholly white in two from Forte do São Joaquim (Rio Branco) and three from British Guiana (Annai; Quonga; unspecified); white streaked with gray in one from Annai and one from Margarita Island; wholly deep neutral gray in one from Quonga; nearly blackish in two from Trinidad. The two specimens recorded by Salvin and Chubb as *B. unicolor* are in the blackish brown melanistic phase (mut. *aethiops* Stresemann) and are hardly distinguishable—except by smaller size—from certain individuals obtained by Natterer in southern Brazil.

Additional material examined.—Trinidad: Chaguanas, 1; Port of Spain, 1.—British Guiana: Annai, 3; Quonga, 2; Roraima, 2; Merumé Mountains, 1; Demerara, 1; unspecified, 1.—Brazil: Forte do São Joaquim, Rio Branco, 2; Marajó, 2.—Curaçao, 2.

Accip., p. 51, 1919—part, Amazonia; idem, Syn. Accip., p. 84, 1922—part, Amazonia; Delacour, Ibis, 1923, p. 145—llanos of Guarico, Venezuela.

Buteo albicaudatus Salvin, Ibis, 1886, p. 74—Roraima; Berlepsch, Journ. Orn., 48, p. 89, 1892—Curaçao (crit.); Robinson and Richmond, Proc. U. S. Nat. Mus., 18, p. 661, 1896—Margarita Island; Clark, Auk, 19, p. 261, 1902—west of Porlamar and El Valle, Margarita Island; Berlepsch, Nov. Zool., 15, p. 291, 1908 (no record from Cayenne); Cory, Field Mus. Nat. Hist., Orn. Ser., 1, pp. 241, 253, 1909—Margarita Island.

Buteo unicolor (not of Lafresnaye and d'Orbigny) Salvin, Ibis, 1886, p. 72—Merumé Mountains and Roraima, British Guiana; Chubb, Bds. Brit. Guiana, 1, p. 233, 1916—same localities (spec. examined).

Buteo albicaudatus albicaudatus Hellmayr, Nov. Zool., 13, p. 46, 1906—Chaguanas and Port of Spain, Trinidad.

Tachytriorchis albicaudatus exiguus Chapman, Bull. Amer. Mus. N. H., 34, p. 637, Dec. 30, 1915—Barrigon, Rio Meta, eastern Colombia (descr. of normal phase of adult; type in the American Museum of Natural History, New York); idem, l.c., 36, p. 242, 1917—Barrigon.

Tachytriorchis albicaudatus colonus Cherrie, Sci. Bull., Mus. Brookl. Inst., 2, p. 343, 1916—Maripa [Caura], Venezuela.

Buteo albicaudatus exiguus Swann, Syn. List Accip., p. 52, 1919—Colombia and Venezuela; idem, Syn. Accip., p. 87, 1922—Colombia and Venezuela; Lehmann, Rev. Univ. Cauca, 6, p. 105, pl., 1945—Llanos del Meta, Colombia (dist. chars.).

Buteo albicaudatus sennetti (not of Allen) Swann, Syn. Accip., p. 86, 1922—part, Venezuela and Amazon Valley.

Buteo albicaudatus hypospodius Swann, Monog. Bds. Prey, 1, p. 419, 1928 (monog.).

Range.—Tropical zone of eastern Colombia (Rio Meta) and across Venezuela (excepting Mérida region) to Surinam, south to the island of Marajó, in the estuary of the Amazon, Brazil; also islands of Aruba, Bonaire, Curaçao, and Trinidad.

Field Museum Collection.—7: Colombia (Villavicencio, Meta, 1); Venezuela (La Asuncion, Margarita Island, 1); British Guiana (Georgetown, 1; Buxton, 3); Brazil (Bõa Vista, Rio Branco, Amazonas, 1).

***Buteo albicaudatus hypospodius** Gurney.[1] SENNETT'S WHITE-TAILED HAWK.

Buteo hypospodius Gurney, Ibis, (3), 6, p. 73, pl. 3, Jan., 1876—part, Colombia (Medellin) and Venezuela (Mérida) (type, from Medellin, in Salvin–Godman Collection, now in the British Museum, examined);

[1] *Buteo albicaudatus hypospodius* Gurney: Similar to *B. a. colonus* in grayish tone of upper plumage, but fully as large as the nominate race. Wing, (males) 410–430, (females) 435–455.

The dorsal surface in the normal, white-bellied plumage varies, rrespective of locality, from neutral gray to dark neutral gray. The color of the throat is likewise variable. Among six adults from Corpus Christi, Texas, three have a

Sclater and Salvin, Proc. Zool. Soc. Lond., 1879, p. 540—Medellin, Colombia; Swann, Syn. List Accip., p. 51, 1919—part, Colombia and Venezuela; idem, Syn. Accip., p. 84, 1922—part, Colombia and Venezuela.

Buteo erythronotus (not of King) Sclater, Proc. Zool. Soc. Lond., **25**, p. 211, 1857—Orizaba, Mexico; idem, l.c., **27**, pp. 368, 389, 1859—Jalapa, Vera Cruz, and Talea, Oaxaca, Mexico; Sclater and Salvin, Ibis, 1860, p. 401—near Antigua, Guatemala; Lawrence, Ann. Lyc. Nat. Hist. N. Y., **9**, p. 133, 1868—San José and San Antonio, Costa Rica; idem, l.c., p. 207, 1869—Mérida, Yucatan; Frantzius, Journ. Orn., **17**, p. 368, 1889—Costa Rica.

Buteo albonotatus (not of Kaup) Sclater and Salvin, Ibis, 1859, p. 217—south slope of Cordillera of Guatemala.

Buteo pterocles (not *Falco pterocles* Temminck) Schlegel, Mus. Pays-Bas, Buteones, p. 13, 1862—part, spec. No. 5, Mexico; Pelzeln, Reise Novara, Zool., **1**, Vögel, p. 16, 1865—part, Mexico (melan.); Sclater and Salvin, Proc. Zool. Soc. Lond., 1870, p. 782—Andes of Mérida, Venezuela (spec. examined); Lawrence, Bull. U. S. Nat. Mus., **4**, p. 41, 1876—Tapana, Tehuantepec, Mexico.

Tachytriorchis pterocles Cabanis, Journ. Orn., **17**, p. 210, 1869—Costa Rica (crit.).

Buteo albicaudatus (not of Vieillot) Salvin, Proc. Zool. Soc. Lond., 1870, p. 275—Calovévora and Chitrá, Veraguas (spec. examined); Merrill, Proc. U. S. Nat. Mus., **1**, p. 154, 1878—Fort Brown, Texas, and Mexico (Colima, City of Mexico, Tehuantepec) (descr.; nest and eggs); Sennett, Bull. U. S. Geol. Geog. Surv. Terr., **5**, No. 3, p. 420, 1879—lower Rio Grande Valley, Texas (nest and eggs descr.); Sclater and Salvin, Proc. Zool. Soc. Lond., 1879, p. 540—Santa Elena and Rio Negro, Antioquia, Colombia; Ferrari-Perez, Proc. U. S. Nat. Mus., **9**, p. 167, 1886—Jalapa, Vera Cruz; Bendire, Life Hist. N. Amer. Bds., **1**, p. 234, pl. 7, figs. 8, 9 (eggs), 1892—Gulf coast and lower Rio Grande Valley, Texas (habits); Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 58, 1900—part, Texas (lower Rio Grande Valley), Mexico (Zacatecas, Jalapa, Mirador, Orizaba, Talea, Puebla, Tehuantepec, Tapana, Tonalá, Cacoprieto, Mérida), Guatemala (Antigua, Dueñas, El Baoul, San Gerónimo), Costa Rica (San José, San Antonio), and Panama (Calovévora, Chitrá).

Tachytriorchis albicaudatus Sharpe, Cat. Bds. Brit. Mus., **1**, p. 162, 1874—part, southern Mexico and Central America; Sumichrast, La Naturaleza, **5**, p. 236, 1881—Mexican localities.

wholly white throat, in one it is entirely blackish, and in two others white streaked with dusky. Two from Antioquia (Santa Elena and Concordia) and one from Oaxaca (Cacoprieto) have the throat dark gray suffused with white medially; one from Mexico (Zacatecas) and one from Veraguas (Calovévora), plain neutral gray; one from San Gerónimo, Guatemala, wholly white.

B. hypospodius was based upon melanistic individuals (in nearly uniform neutral gray plumage) from Antioquia (Medellin) and Venezuela (low wooded region of Mérida). This mutation has not yet been recorded from either Texas or Central America.

Additional material examined.—Texas: Corpus Christi, 10.—Mexico: Zacatecas, 1; Cacoprieto, Oaxaca, 1; unspecified, 2.—Guatemala: San Gerónimo, 1; Dueñas, 1.—Panama: Calovévora, Veraguas, 1.—Colombia: Santa Elena, 1; Concordia, 1; Medellin, 2; Rio Negro, 1.—Venezuela, Mérida: lower wooded region of Mérida, 1; El Valle, 1; Muenrabá, 1.

Buteo (*Craxirex*) *albicaudatus* Ridgway, Proc. Acad. Nat. Sci. Phila., 1875, p. 98—part, Central America (Mirador, Colima, City of Mexico, Tehuantepec, etc.).

Buteo albicaudatus sennetti Allen, Bull. Amer. Mus. N. H., **5**, p. 144, July 19, 1893—lower Rio Grande Valley, Texas (type in the American Museum of Natural History, New York); Carriker, Ann. Carnegie Mus., **6**, p. 456, 1910—Costa Rica (San José, Cerro de Santa Maria, Laguna de Ochomogo); Phillips, Auk, **28**, p. 73, 1911—Altamira and Matamoros, Tamaulipas; Swann, Syn. List Accip., p. 52, 1919 (range in part); idem, Syn. Accip., p. 86, 1922—part, Texas to Colombia; Stresemann, Journ. Orn., **73**, p. 312, 1925 (melanism in Colombia and Mérida); Griscom and Crosby, Auk, **42**, p. 535, 1925—Brownsville, Texas; Friedmann, l.c., p. 545, 1925—Brownsville, Texas; Swann, Monog. Bds. Prey, **1**, p. 418, pls. [23] and [33], fig. 8 (nest and eggs), 1928—Texas to Colombia (monog.); Griscom, Bull. Amer. Mus. N. H., **64**, p. 152, 1932—Progreso, Guatemala.

Buteo albicaudatus exiguus (not of Chapman) Swann, Auk, **38**, p. 361, 1921—Montañas Morro, Mérida, Venezuela.

Buteo albicaudatus subsp. Todd and Carriker, Ann. Carnegie Mus., **14**, p. 150, 1922—Bonda, Santa Marta, Colombia (crit.).

Buteo albicaudatus hypospodius Stresemann, Journ. Orn., **73**, pp. 317, 318, 1925—Texas to Colombia and Venezuela (Mérida) (meas.); Peters, Bds. World, **1**, p. 228, 1931 (range); Griscom, Bull. Mus. Comp. Zool., **75**, p. 373, 1934—Chilpancingo, Guerrero; idem, l.c., **78**, p. 298, 1935—Veraguas; Bent, Bull. U. S. Nat. Mus., **167**, p. 216, 1937 (life hist.); Lehmann, Rev. Univ. Cauca, **6**, p. 94, 1945—Cauca, Tolima, and Sierra de Perija, Magdalena (pls.).

Buteo albicaudatus albicaudatus Chapman, Bull. Amer. Mus. N. H., **55**, p. 226, 1926—part, San Pedro, Antioquia, Colombia (crit.).

Buteo albicaudatus colonus (not of Berlepsch) Lehmann, Rev. Univ. Cauca, **6**, p. 99, 1945—part, Santa Marta and La Guajira, Colombia.

Range.—Southern Texas and southward through Mexico, Guatemala, Costa Rica, and Panama to northern Colombia (Santa Elena, Rio Negro, Medellin, and San Pedro, Antioquia; Bonda, Santa Marta region) and western Venezuela (Cordillera of Mérida).

Field Museum Collection.—19: Texas (Laredo, 1; Rockport, 1; Fancher, Baylor County, 1; Nueces County, 2; Cameron County, 5; Brownsville, 7); Mexico (Alamos, Tres Marias, Sonora, 1); Honduras (Rio Guanaca, Colon, 1).

*Buteo albonotatus Kaup. ZONE-TAILED HAWK.

[*Buteo*] *albonotatus* (G. R. Gray)[1] Kaup, Isis, 1847, Heft 5, col. 329, May, 1847—no locality given=Mexico (type in British Museum examined); idem, l.c., Heft 12, col. 954 (corr.).

[1] *Buteo albonotatus* G. R. Gray (List Spec. Bds. Brit. Mus., Part 1, Accipitres, p. 17, 1844—Mexico) is a nomen nudum.

Buteo albonotatus Kaup, Contr. Orn., 1850, p. 74—"South America"=Mexico (diag.); Sclater, Proc. Zool. Soc. Lond., **28**, p. 253, 1860—vicinity of Orizaba, Mexico; Frantzius, Journ. Orn., **17**, p. 368, 1869—San Antonio, Costa Rica; Lawrence, Mem. Bost. Soc. N. H., **2**, p. 302, 1874—Mazatlan, Mexico; van Rossem, Bull. Mus. Comp. Zool., **77**, p. 429, 1934—Alamos, Hacienda de San Rafael, and Oposura, Sonora; idem, Trans. San Diego Soc. N. H., **8**, p. 127, 1936—Arivaca and Baboquivaris, Sonora (breeding); Van Tyne and Sutton, Misc. Pub., Mus. Zool. Univ. Mich., **37**, p. 22, 1937—Hot Springs and west of Boquillos, Brewster County, Texas (crit.); Bent, Bull. U. S. Nat. Mus., **167**, p. 212, 1937 (life hist.; range).

Buteo abbreviatus Cabanis, in Schomburgk, Reisen Brit. Guiana, **3**, "1848," p. 739, 1849—upper Pomeroon River, British Guiana (type in Berlin Museum); Sclater, Proc. Zool. Soc. Lond., 1883, p. 348—near the gates of Lima, Peru (Sept., 1862); Brewster, Bull. Nutt. Orn. Cl., **8**, p. 30, 1883—Tucson, Arizona; Mearns, Auk, **3**, p. 63, 1886—New River and Verde River, Arizona (descr. of plumages; habits); Salvin, Ibis, 1886, p. 72—British Guiana (ex Cabanis); Ferrari-Perez, Proc. U. S. Nat. Mus., **9**, p. 167, 1886—Chietla, Puebla, Mexico (December); Bendire, Life Hist. N. Amer. Bds., **1**, p. 228, pl. 7, fig. 6 (egg), 1892—southwestern United States (habits); Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 59, 1900—southwestern United States, Mexico (Hermosillo, Sonora; Mazatlan; Valley of Mexico; Sierra de Valparaiso, Zacatecas; Chietla, Puebla; "Vera Cruz"=near Orizaba), Guatemala, Costa Rica (San Lucas, La Palma, San Antonio); Robinson and Richmond, Proc. U. S. Nat. Mus., **24**, p. 167, 1901—La Guaira, Venezuela; Miller, Bull. Amer. Mus. N. H., **21**, p. 346, 1905—Escuinapa, Sinaloa; Thayer and Bangs, Bull. Mus. Comp. Zool., **46**, p. 144, 1905—San Miguel Island, Pearl Archipelago; Carriker, Ann. Carnegie Mus., **6**, p. 456, 1910—Costa Rica (rare migrant); Rendahl, Ark. Zool., **13**, No. 4, p. 19, 1920—San Miguel Island, Panama; Todd and Carriker, Ann. Carnegie Mus., **14**, p. 150, 1922—Mamatoco (July 31) and Bonda (June 23, Sept. 27), Santa Marta, Colombia; Griscom and Crosby, Auk, **42**, p. 535, 1925—Brownsville, Texas; Huey, l.c., **43**, p. 353, 1926—Lower California (La Grulla, Sierra San Pedro Mártir; El Rayo, Sierra Juárez; Laguna Hanson); Grinnell, Univ. Calif. Pub. Zool., **32**, p. 109, 1928—Lower California (chiefly in San Pedro Mártir region).

Buteo zonocercus Sclater, Proc. Zool. Soc. Lond., **26**, p. 130, July 12, 1858—Guatemala (type in Norwich Museum); idem, Trans. Zool. Soc. Lond., **4**, (6), p. 263, pl. 59, 1858—Guatemala; Sclater and Salvin, Ibis, 1859, p. 217—southern slope of the Cordillera of Guatemala; Coues, Proc. Acad. Nat. Sci. Phila., 1866, p. 46—Gila River, Arizona; Léotaud, Ois. Trinidad, p. 9, 1866—Trinidad (rare); Cooper, Geol. Surv. Calif., Orn., **1**, p. 479, 1870—thirty miles north of San Diego, California; Brewster, Bull. Nutt. Orn. Cl., **4**, p. 80, 1879—Comal County, Texas (nest and eggs descr.); Stevens, l.c., p. 189, 1879—Gila River, New Mexico (breeding).

Buteo cabanisii Schlegel, Mus. Pays-Bas, Buteones, p. 11 (note), 1862—Mexico and British Guiana (cotypes[1] in Berlin Museum).

[1] Schomburgk's Guianan specimen is the type of *B. abbreviatus* Cabanis.

Buteo fuliginosus (not of Sclater) Lawrence, Ann. Lyc. Nat. Hist. N. Y., 9, p. 133, 1868—La Palma, Costa Rica; Frantzius, Journ. Orn., 17, p. 368, 1869—La Palma.

Tachytriorchis abbreviatus Sharpe, Cat. Bds. Brit. Mus., 1, p. 163, 1874 (monog.); Penard, Vog. Guyana, 1, p. 391, 1908—Surinam; Snethlage, Bol. Mus. Goeldi, 8, p. 130, 1914—Pacoval, Marajó, Brazil; Chubb, Bds. Brit. Guiana, 1, p. 232, 1916—upper Pomeroon River; Snethlage, Bol. Mus. Nac. Rio de Janeiro, 2, No. 6, p. 47, 1926—Ceará.

Buteo abbreviatus abbreviatus Swann, Syn. List Accip., p. 51, 1919 (range); idem, Auk, 38, p. 360, 1921 (crit.).

Buteo albonotatus albonotatus Swann, Syn. Accip., p. 83, 1922—Mexico to Texas, Arizona, and New Mexico (chars.); idem, Monog. Bds. Prey, 1, p. 406, 1928 (monog.); Peters, Bds. World, 1, p. 232, 1931—southwestern United States to Panama; van Rossem, Trans. San Diego Soc. N. H., 6, p. 243, 1931—Obregón, Sonora; Griscom, Bull. Amer. Mus. N. H., 64, p. 153, 1932—Ocos, Guatemala (crit.); idem, Bull. Mus. Comp. Zool., 72, p. 313, 1932—Permé, Darien; idem, l.c., 78, p. 298, 1935—Permé; van Rossem, Occ. Pap., Mus. Zool. Louisiana State Univ., 21, p. 56, 1945—Sonora (distr.).

Buteo albonotatus abbreviatus Swann, Syn. Accip., p. 83, 1922—Pearl Islands east to Surinam, south to Bolivia, Peru, and Brazil (chars.); idem, Monog. Bds. Prey, 1, p. 408, 1928 (monog.); Peters, Bds. World, 1, p. 232, 1931—Pearl Islands and northern South America; Belcher and Smooker, Ibis, 1934, p. 591—Trinidad (resident); Griscom, Bull. Mus. Comp. Zool., 78, p. 299, 1935—Pearl Islands; Lehmann, Rev. Univ. Cauca, 6, p. 121, 1945—Meta and Morelia, Colombia (disc.).

Range.—Breeds from the southwestern United States (southwestern Texas, New Mexico, Arizona, and extreme southern California) south throughout Lower California and Mexico to northern Nicaragua (teste Griscom); also scattered records from Costa Rica, Panama (San Miguel, Pearl Islands; Permé, Darien), Colombia (Santa Marta region; Caqueta), western Peru (near Lima), Venezuela (Macuto and La Guaira, near Caracas), British Guiana (upper Pomeroon River), Surinam, the Island of Trinidad, Brazil (Pacoval, Marajó Island; Paraná), Paraguay and Bolivia.[1]

[1] We do not know on what material Swann based his distinction between *albonotatus* and *abbreviatus*, but as far as color-characters are concerned this difference is certainly not borne out by the specimens in the British Museum and others examined. The slaty tone of the plumage, said to be characteristic of the northern form, is discernible only in a bird from the Sierra de Valparaiso, Zacatecas, but recurs in a male obtained by W. Nation near the gates of Lima, Peru. The presence of subterminal white spots in the body plumage is a purely individual feature. The type of *albonotatus*, a male from Presidio de Mazatlan, Sinaloa, the Lima bird, and one from Paraná, southern Brazil, are profusely spotted with white, particularly below; a male from Hermosillo, Sonora, shows numerous spots on foreneck and chest; one from Mexico has just a few on the outer webs of the upper tail coverts, while the Zacatecas specimen has none at all. The rectrices vary but little as to the number and color of the light cross-bands. As to dimensions, there is perhaps a slight average difference in that the birds from the United

Field Museum Collection.—9: Arizona (Tucson, Pima County, 1; Baboquivari Valley, Pima County, 2; Camp Lowell, Cochise County, 1; Phoenix, Maricopa County, 1); Texas (Brownsville, 1); Mexico (Tampico, Tamaulipas, 1); Venezuela (Maracay, Aragua, 1); Paraguay (195 km. west of Puerto Casado, 1).

***Buteo nitidus plagiatus** (Schlegel). MEXICAN GOSHAWK.

Asturina plagiata Schlegel,[1] Mus. Pays-Bas, 2, Asturinae, p. 1 (note), 1862—Vera Cruz, Mexico (descr. of young; cotypes in Berlin Museum); Sclater and Salvin, Proc. Zool. Soc. Lond., 1869, p. 130—Mexico (Nuevo León, Jalapa, Vera Cruz), Guatemala, and Costa Rica (monog.); iidem, Exot. Orn., p. 170, pl. 90 (adult and young), 1869—Mexico, Guatemala (Vera Paz, San Gerónimo), and Costa Rica (La Barránca, Pacific coast); Salvin, Ibis, 1869, p. 317—Costa Rica; idem, Ibis, 1870, p. 114—Costa Rica (crit.); Sclater and Salvin, Proc. Zool. Soc. Lond., 1870, p. 838—San Pedro, Honduras; Finsch, Abhandl. Naturw. Ver. Bremen, 2, p. 325, 1870—Mazatlan, Sinaloa (crit.); Sharpe, Cat. Bds. Brit. Mus., 1, p. 204, 1874 (monog.); Lawrence, Mem. Bost. Soc. N. H., 2, p. 298, 1874—Mazatlan; idem, Bull. U. S. Nat. Mus., 4, p. 38, 1876—Tehuantepec (Chihuitan, Santa Efigenia, Tehuantepec City); Nutting, Proc. U. S. Nat. Mus., 5, p. 403, 1882—La Palma de Nicoya, Costa Rica; idem, l.c., 6, p. 377, 1883—San Juan del Sur, Nicaragua; Boucard, Proc. Zool. Soc. Lond., 1883, p. 456—Yok-satz, Yucatan; Nutting, Proc. U. S. Nat. Mus., 6, p. 388, 1884—Sucuyá, Nicaragua; Scott, Auk, 3, p. 423, 1886—near Tucson, Arizona; Ferrari-Perez, Proc. U. S. Nat. Mus., 9, p. 166, 1886—Jalapa and Plan del Rio, Vera Cruz; Zeledón, Anal. Mus. Nac. Costa Rica, 1, p. 126, 1887—Acajutla, Salvador, and San Mateo, Costa Rica; Salvin, Ibis, 1889, p. 374—Ruatan Island; Stone, Proc. Acad. Nat. Sci. Phila., 1890, p. 205—Tunkas, Yucatan; Bendire, Life Hist. N. Amer. Bds., 1, p. 251, 1892—southern Arizona and New Mexico (habits); Allen, Bull.

States and Central America are larger, but the material from South America is altogether inadequate, and a female from Bolivia (Prov. del Sara) is larger than any other we have seen! Besides, it appears that at least some of the individuals taken in South America are merely migrants from the north, and aside from the dates of certain Santa Marta records (Mamatoco, July 31; Bonda, June 23), which might refer to breeding birds, there does not exist any absolutely conclusive proof for the nesting of this buzzard anywhere east of the Andes. Schomburgk's note on its breeding in British Guiana was based on hearsay, and what the Penards say about Surinam is not very definite either. The two eggs taken near Diego Martin, Trinidad, on March 2, 1927, by Belcher and Smooker were "believed to be of this species," so the identity of the breeding birds was evidently not ascertained beyond doubt.

Wing measurements (adults).—Males: Arizona, 397; Sonora (Hermosillo), 395; Sinaloa (Presidio de Mazatlan), 390; Honduras (Santa Ana), 405; Surinam, 385; Lima, Peru, 386; Paraná, Brazil, 375. Females: Arizona (four), 410–430; Zacatecas (Sierra de Valparaiso), 415; Bolivia (Prov. del Sara), 460.

Van Tyne and Sutton give the wing of a male from Brewster County, Texas, as 384, that of a female from the same locality as 431 mm.

[1] *Buteo plagiatus* Lichtenstein (Nomencl. Av. Mus. Zool. Berol., p. 3, 1854—Mexico) is a nomen nudum.

Amer. Mus. N. H., **5**, p. 34, 1893—Fronteras and Oputo, Sonora; Lantz, Trans. Kans. Acad. Sci., **16**, p. 219, 1899—Naránjo, Guatemala; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 74, 1900—Mexico to Costa Rica; Miller, Bull. Amer. Mus. N. H., **21**, p. 345, 1905—Escuinapa and Papachal, Sinaloa; idem, l.c., **22**, p. 163, 1906—La Ciénaga, Durango; Cole, Bull. Mus. Comp. Zool., **50**, p. 121, 1906—Chichen Itzá, Yucatan; Bailey, Auk, **23**, p. 386, 1906—San Blas, Tepic (breeding); Dearborn, Field Mus. Nat. Hist., Orn. Ser., **1**, p. 82, 1907—Gualan and Patulul, Guatemala; Visher, Auk, **27**, p. 281, 1910—Pima County, Arizona (breeding); Carriker, Ann. Carnegie Mus., **6**, p. 459, 1910—Santo Domingo, Bolson, and Bebedéro, Costa Rica; Phillips, Auk, **28**, p. 73, 1911—Altamira, Rio Martinez, Santa Leonor, and Rio Cruz, Tamaulipas; Swann, Syn. List Accip., p. 55, 1919 (chars.; range); Rendahl, Ark. Zool., **12**, No. 8, p. 9, 1919—Zapatera, Nicaragua.

Asturina nitida (not *Falco nitidus* Latham) Sclater, Proc. Zool. Soc. Lond., **25**, pp. 201, 227, 1857—Jalapa and Santecomapam, Vera Cruz; Baird, Rep. Expl. & Surv. Pacif. R. R., **9**, p. 35, 1858—Nuevo León, Mexico; Sclater, Proc. Zool. Soc. Lond., **27**, pp. 368, 389, 1859—vicinity of Jalapa, Talea, and Playa Vicente, Vera Cruz; Sclater and Salvin, Ibis, 1859, p. 217—hot country of both coasts of Guatemala; Taylor, Ibis, 1860, p. 225—Comayagua and Tigre Island, Honduras; Owen, Ibis, 1861, p. 68—San Gerónimo, Guatemala (eggs descr.); Sclater, Proc. Zool. Soc. Lond., 1864, p. 178—vicinity of Mexico City; Salvin, Ibis, 1866, p. 204—Guatemala; Lawrence, Ann. Lyc. Nat. Hist. N. Y., **9**, p. 133, 1868—Gulf of Nicoya, Costa Rica; Frantzius, Journ. Orn., **17**, p. 369, 1869—Costa Rica.

Morphnus schistaceus (not *Asturina schistacea* Sundevall) Sclater, Proc. Zool. Soc. Lond., **25**, p. 227, 1857—Santecomapam, Vera Cruz.

Urubitinga ——? Sclater and Salvin, Ibis, 1859, p. 216—Guatemala (cf. Salvin, Ibis, 1866, p. 204).

Asturina polionota (not of Kaup, 1847) Cabanis, Journ. Orn., **17**, p. 208, 1869—Costa Rica (descr. of adult; type in Berlin Museum).

Asturina nitida plagata Brewster, Bull. Nutt. Orn. Cl., **8**, p. 31, 1883—Tucson, Arizona (nest and eggs descr.).

Asturina plagiata micrus Miller and Griscom, Amer. Mus. Nov., **25**, p. 4, Dec. 7, 1921—four miles northeast of Chinandega, Nicaragua (type in the American Museum of Natural History, New York); Peters, Bull. Mus. Comp. Zool., **69**, p. 416, 1929—Lancetilla, Tela, and Progreso, Honduras (crit.); van Rossem, Condor, **32**, p. 303, 1930 (crit.); Swann, Monog. Bds. Prey, **1**, p. 436, 1930 (monog.); Stone, Proc. Acad. Nat. Sci. Phila., **84**, p. 300, 1932—Cantarranas, Honduras; Griscom, Bull. Amer. Mus. N. H., **64**, p. 155, 1932—Guatemala (Finca Carolina, Finca El Cipres, Finca El Espina, Puebla, Hacienda California, San Lucas); Bond, Proc. Acad. Nat. Sci. Phila., **88**, p. 356, 1936—Ruatan Island.

Asturina plagiata plagiata Swann, Syn. Accip., p. 90, 1922—Arizona, Texas, and Mexico; Griscom, Amer. Mus. Nov., **235**, p. 12, 1926—Palmul and Acomal, eastern Yucatan; McLellan, Proc. Calif. Acad. Sci., (4), **16**, p. 20, 1927—Labrados, Sinaloa; Griscom and Crosby, Auk, **42**, p. 535, 1928—Lomita, lower Rio Grande, Texas; Austin, Bull. Mus. Comp. Zool., **69**, p. 373, 1929—Belize, British Honduras; Swann, Monog. Bds. Prey,

1, p. 435, 1930 (monog.); van Rossem, Condor, **32**, p. 303, 1930 (crit.); Griscom, Bull. Mus. Comp. Zool., **75**, p. 373, 1934—Acapulco and Coyuca, Guerrero; Bent, Bull. U. S. Nat. Mus., **167**, p. 264, 1937 (habits).

Asturina plagiata minor Swann, Syn. Accip., p. 90, 1922—Costa Rica and Nicaragua (lapsus for *A. p. micrus*).

Asturina nitida plagiata Bangs and Peters, Bull. Mus. Comp. Zool., **68**, p. 388, 1928—Chivelá and Tapanatepec, Oaxaca; Peters, Bds. World, **1**, p. 240, 1931 (range).

Asturina plagiata maxima van Rossem, Condor, **32**, p. 303, Nov., 1930—San Javier, Sonora (type in coll. of D. R. Dickey, in the University of California, Los Angeles); idem, Trans. San Diego Soc. N. H., **6**, p. 243, 1931—Sonora (San Javier, Saric, Chinobampo, Guirocoba, Magdalena).

Asturina nitida micrus Peters, Bds. World, **1**, p. 240, 1931 (range); Van Tyne, Misc. Pub., Mus. Zool. Univ. Mich., **27**, p. 16, 1935—Chuntuquí, Petén, Guatemala.

Buteo plagiatus maximus van Rossem, Bull. Mus. Comp. Zool., **77**, p. 429, 1934—Sonora (Alamos, San Rafael, Nacozari).

Buteo nitida micrus Wetmore, Proc. U. S. Nat. Mus., **89**, p. 532, 1941—Las Lajas, Guatemala; Traylor, Field Mus. Nat. Hist., Zool. Ser., **24**, p. 203, 1941—Chichen Itza, Yucatan, and Matamoros, Campeche.

Buteo nitidus maximus van Rossem, Occ. Pap., Mus. Zool. Louisiana State Univ., **21**, p. 57, 1945—Sonora (distr.).

Range.—Southern Arizona, southwestern New Mexico, and southern Texas (lower Rio Grande Valley) south through Mexico and Central America to northwestern Costa Rica (Gulf of Nicoya).[1]

Field Museum Collection.—38: Arizona (Tucson, 1; Calabasas, 1); Mexico (Camoa, Sonora, 2; Estancia, Sinaloa, 1; San Simon, Sinaloa, 1; Apatzingan, Michoacan, 3; Colima, 1; Matamoros, Campeche, 1;

[1] Several attempts have been made to subdivide the Mexican Goshawk, but on examining a very satisfactory series of nearly eighty specimens we fail to see any justification in recognizing more than one form. To begin with, the gray bars underneath in *B. n. micrus* from Costa Rica and Nicaragua are neither broader nor darker than in numerous Mexican examples. The tail markings, in the light of the British Museum material, prove to be without any consequence, being subject to much individual variation. In the very large Mexican series there are but a few in which the second tail-band can be called complete, viz., in one each from Sonora, Mazatlan, Tampico, Sierra Madre (above Ciudad Victoria), Plan del Rio (Jalapa), and Yucatan (Peto), as well as in two from Nuevo León. In all the others, it is more or less incomplete; on the median rectrix it is often merely suggested by an oval spot on each side of the shaft, such as in one from the Plains of Colima, one from Sierra Madre (above Ciudad Victoria), one from Yucatan, and two from Nuevo León. Only a few examples (Sonora, 1; Tampico, 1; Nuevo León, 1; Presidio de Mazatlan, 2) show traces of a third white bar at the root of the tail. Among five Guatemalan skins, four have an incomplete second band like the majority from Mexico, while the fifth has just a tiny oval white spot near the shaft of the outer web, thus less than any other specimen except some Ruatan birds. Of the so-called "*micrus*," one from Bebedéro, Costa Rica, has two complete white tail-bands and on the lateral rectrices indications of a third near the base; two others, from La Libertad, Salvador, and Chinandega, Nicaragua, respectively, likewise show a fairly well-marked second bar not quite reaching the shaft; while one from San Emilio, Nicaragua, has but a limited central

Chichen Itzá, Yucatan, 2; Yucatan, 1; Escemapa, 1); Guatemala (Escuintla, Escuintla, 1; Tiquisate, Escuintla, 1; Patulul, Solola, 1; Gualan, Zacapa, 1; San José, 2); El Salvador (Laguna Olomega, San Miguel, 2; Sitio del Ninio, La Libertad, 2; Sonsonate, Sonsonate, 1; San Sebastian, 1; Hacienda Zapatitan, 1); Honduras (Cofradia, Cortes, 1; Santa Barbara, Santa Barbara, 1); Nicaragua (San Emilio, Rivas, 1); Costa Rica (Ballena, Guanacaste, 2; Bebedero, Guanacaste, 2; Punta Piedra, Guanacaste, 1; Paquera, Nicoya, 1; Las Agujas, 1).

***Buteo nitidus blakei** nom. nov.[1] COSTA RICAN GOSHAWK.

Asturina nitida costaricensis (not *Buteo borealis* var. *costaricensis* Ridgway, 1874) Swann, Syn. Accip., p. 90, Jan. 2, 1922—Pózo del Rio Grande, "Bornea" (=Boruca), Costa Rica (type in Museum of Comparative Zoology, Cambridge, Mass.); idem, Monog. Bds. Prey, **1**, p. 434, 1930—Costa Rica to Panama (monog.); Darlington, Bull. Mus. Comp. Zool., **71**, p. 366, 1930—Rio Frio and Santa Marta, Magdalena, Colombia (crit.); Peters, Bds. World, **1**, p. 240, 1931—southwestern Costa Rica to Panama; Griscom, Bull. Mus. Comp. Zool., **72**, p. 314, 1932—Permé and Obaldia, Panama; idem, l.c., **78**, p. 299, 1935—Pacific slope of Panama (Veraguas, Canal Zone, Darien); Davidson, Proc. Calif. Acad. Sci., (4), **23**, p. 256, 1938—Barriles, Chiriquí, Panama.

spot involving both sides of the shaft, like a male from the Plains of Colima. As to size, specimens from Nicaragua and northwestern Costa Rica are practically the same as those from eastern Mexico (typical *plagiata*), while in the inhabitants of western Mexico (Sonora to Tepic) there is a very slight tendency to larger dimensions.

Five birds from Ruatan Island, off Honduras, have a lesser amount of white in the tail than those from the continent, only one having an incomplete second bar, like the majority from Mexico; two, a small oval white spot on each side of the shaft, like the male from the Plains of Colima; and two others, just a faint trace on the outer web near the shaft.

Wing measurements (adults).—Males: Sonora, 250, 250, 254; Presidio de Mazatlan, 250; Mazatlan, 245; Plain of Colima, 255, 260; near Guadalajara, Jalisco, 255; Santiago, Tepic, 250; Salina Cruz, Oaxaca, 250; Nuevo León (Rio Camacha, Hacienda La Cruz), 250, 255, 260; Tamaulipas (Sierra Madre, above Ciudad Victoria), 235, 260; Vera Cruz (Plan del Rio Jalapa, Laguna Verde), 245, 245, 250; Chiapas (Tuxtla, San Benito, Huehuetan), 240, 240, 242; Yucatan (Peto), 236, 240; Ruatan Island, Honduras, 240, 242; Guatemala (Chimalapa, San Gerónimo), 240, 250; La Libertad, Salvador, 243; Nicaragua (San Emilio, Chinandega), 240, 243; Costa Rica (Nicoya), 247. Females: Presidio de Mazatlan, 275; Mazatlan, 290; Manzanillo, Colima, 270; Nuevo León, 265, 265; Tamaulipas (Tampico, Xicotencal, Sierra Madre), 270, 275, 275; Ruatan Island, off Honduras, 265, 270; Guatemala (Polochic River; Savanna Grande), 262, 268; Nicaragua (Chinandega), 270; Costa Rica (Bebedéro), 260.

[1] *Buteo nitidus blakei* Hellmayr and Conover: Very similar to *B. n. nitidus*, but somewhat darker above and below.

This rather questionable form is admitted on the authority of Darlington and Griscom. The only two available specimens, both from the Panama Railroad, we are unable to separate satisfactorily from the nominate race. We have no material from western Ecuador.—C.E.H.

Asturina nitida (not *Falco nitidus* Latham) (?)Sclater, Proc. Zool. Soc. Lond., 28, p. 288, 1860—Babahoyo, western Ecuador; Lawrence, Ann. Lyc. Nat. Hist. N. Y., 7, p. 316, 1861—Atlantic side of Panama; Sclater and Salvin, Proc. Zool. Soc. Lond., 1864, p. 369—Panama Railroad; iidem, l.c., 1869, p. 130—part, Panama and (?)western Ecuador; Sharpe, Cat. Bds. Brit. Mus., 1, p. 203, 1874—part, Panama; Salvin and Godman, Biol. Centr.-Amer., Aves, 3, p. 73, 1900—part, Panama; Bangs, Proc. New Eng. Zool. Cl., 2, p. 15, 1900—Loma del León, Panama; Allen, Bull. Amer. Mus. N. H., 13, p. 129, 1900—Bonda, Santa Marta; Bangs, Auk, 24, p. 290, 1907—El Pózo de Térraba, Costa Rica; Carriker, Ann. Carnegie Mus., 6, p. 459, 1910—El Pózo de Térraba, Costa Rica; Chapman, Bull. Amer. Mus. N. H., 36, p. 243, 1917—part, Remolino, Magdalena; Stone, Proc. Acad. Nat. Sci. Phila., 70, p. 249, 1918—Gatun, Panama.

Asturina nitida nitida Swann, Syn. List Accip., p. 55, 1919—part, Panama and Colombia; Todd and Carriker, Ann. Carnegie Mus., 14, p. 153, 1922—Bonda, Don Diego, Mamatoco, and Dibulla, Santa Marta, Colombia.

Range.—Southwestern Costa Rica (Térraba Valley) south through Panama to the lower Magdalena Valley and the Santa Marta region, Colombia; (?)western Ecuador.

Field Museum Collection.—1: Colombia (Caracolicito, Magdalena, 1).[1]

***Buteo nitidus nitidus** (Latham). GUIANAN SHINING GOSHAWK.

Falco nitidus Latham, Ind. Orn., 1, p. 41, 1790—based on "Plumbeous Falcon" Latham, Gen. Syn. Bds., Suppl., p. 37, Cayenne; Temminck, Nouv. Rec. Pl. Col., livr. 15, pls. 87 (adult), 294 (young), Oct., 1821—Guiana and Brazil; Spix, Av. Spec. Nov. Bras., 1, p. 19, 1924—Island of Marajó, Brazil.

Asturia (sic) *cinerea* Vieillot, Anal. Nouv. Orn. Élém., p. 68, April, 1816—Guiana; idem and Oudart, Gal. Ois., 1, (1), pl. 20, 1820.

Astur striolatus Cuvier, Règne Anim., 1, p. 332, 1829—based on Temminck, Nouv. Rec. Pl. Col., pls. 87, 294, and Vieillot [and Oudart], Gal. Ois., 1, (1), pl. 20.

Asturina nitida Cabanis, in Schomburgk, Reisen Brit. Guiana, 3, "1848," p. 737, 1849—coast of British Guiana; Pelzeln, Verh. Zool. Bot. Ges. Wien, 12, pp. 140, 172, 1862—part, Cayenne, Borba, Barra do Rio Negro, and Pará; Schlegel, Mus. Pays-Bas, Asturinae, p. 1, 1862—Surinam and Cayenne; Taylor, Ibis, 1864, p. 80—Trinidad; Sclater and Salvin, Proc. Zool. Soc. Lond., 1867, p. 589—northern side of Amazon; Pelzeln, Orn. Bras., 1, p. 3, 1868—part, Borba, Barra do Rio Negro, and Pará, Brazil; Sclater and Salvin, Proc. Zool. Soc. Lond., 1868, pp. 169, 173—north coast of Venezuela; iidem, l.c., 1869, p. 130—part, Bogotá, Venezuela, Trinidad, Cayenne, British Guiana, lower Amazon, Barra [do Rio Negro], and Borba (monog.); Sharpe, Cat. Bds. Brit. Mus., 1, p. 203, 1874—part,

[1] This specimen is distinctly lighter than two adult skins from British Guiana and a series from Amazonian Brazil. Therefore it is exactly opposite to the description given by Swann but agrees with Darlington's remarks on birds from Santa Marta, the type and two other skins from Costa Rica.—B.C.

spec. d–f, north side of Amazon, Caracas, and Demerara; Allen, Bull. Essex Inst., 8, p. 82, 1876—Santarem; Salvin, Ibis, 1886, p. 72—British Guiana; Riker and Chapman, Auk, 8, p. 161, 1891—Santarem, Brazil; Salvadori and Festa, Boll. Mus. Zool. Torino, 15, No. 368, p. 30, 1900—Gualaquiza, Ecuador; Berlepsch and Hartert, Nov. Zool., 9, p. 113, 1902—Suapuré, Caura, Venezuela; Hellmayr, Nov. Zool., 13, p. 382, 1906—Santo Antonio do Prata, Pará; Ihering, Cat. Faun. Braz., 1, p. 90, 1907 (range in part); Hellmayr, Nov. Zool., 14, p. 89, 1907—Teffé, Rio Solimões, Brazil; Berlepsch, l.c., 15, p. 292, 1908—Cayenne; Stone, Proc. Acad. Nat. Sci. Phila., 65, p. 194, 1913—Boca Uracoa, Manimo River, Venezuela; Snethlage, Bol. Mus. Goeldi, 8, p. 131, 1914—Pará, Peixe-Boi, Arapiranga, Marajó (Pacoval, Dunas), and Maranhão; Cherrie, Sci. Bull., Mus. Brookl. Inst., 2, p. 344, 1916—Caicara, Orinoco, Venezuela; Chubb, Bds. Brit. Guiana, 1, p. 237, 1916—Annai, Upper Takutu Mountains, Mazaruni River, and Abary River; Chapman, Bull. Amer. Mus. N. H., 36, p. 243, 1917—part, Villavicencio and Barrigon, eastern Colombia; Stone, Proc. Acad. Nat. Sci. Phila., 80, p. 154, 1928—Pará.

Astur nitidus Léotaud, Ois. Trinidad, p. 46, 1866—Trinidad.

Asturina nitida nitida Hellmayr, Nov. Zool., 17, p. 411, 1910—Borba, Rio Madeira; idem, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., 26, No. 2, pp. 77, 96, 1912—Pará and Santo Antonio, Pará; Bangs and Penard, Bull. Mus. Comp. Zool., 62, p. 36, 1918—vicinity of Paramaribo, Surinam; Swann, Syn. List Accip., p. 55, 1919—part, Amazonia and Guiana; idem, Syn. Accip., p. 89, 1922—part, Amazonia, Ecuador, Guiana, and Colombia; Chapman, Bull. Amer. Mus. N. H., 55, p. 231, 1926—Zamora, Ecuador; Swann, Monog. Bds. Prey, 1, p. 432, 1930—part, Amazonia, Ecuador, Guiana, and Colombia; Peters, Bds. World, 1, p. 241, 1931 (in part); Belcher and Smooker, Ibis, 1934, p. 591—Trinidad (nest and eggs descr.); Roberts, Trop. Agric., 11, p. 89, 1934—Caroni Swamp, Trinidad.

Range.—Island of Trinidad, Venezuela west to the eastern base of the East Colombian Andes (Villavicencio, Barrigon), and eastern Ecuador; the Guianas; Amazonian Brazil east to the wooded region of northern Maranhão.[1]

Field Museum Collection.—19: Colombia (Quename, Llanos del Meta, 1); Venezuela (Lake Valencia, Carabobo, 1; Cocollar, Sucre, 1); Trinidad (unspecified, 1); British Guiana (Rockstone, 1; Buxton, 1; unspecified, 1); Brazil (Serra da Lua, Rio Branco, 1; Labrea, Rio Purús, 1; Canutama, Rio Purús, 1; Itacoatiara, Amazonas, 2; Igarape Aniba, Amazonas, 2; Lago do Baptista, Amazonas, 1; Utinga, Pará, 1; Caxiricatuba, Rio Tapajoz, 1; Obidos, Pará, 2).

[1] Birds from Pará, the lower Rio Madeira (Borba), and the lower Rio Purús agree perfectly with others from Guiana, Venezuela, Trinidad, and "Bogotá."

Additional material examined.—Colombia: "Bogotá," 2.—Venezuela: Maracay, Lake of Valencia, 5; unspecified, 1.—Trinidad: Icacos, 1.—British Guiana: Upper Takutu Mountains, 1; Mazaruni River, 1; Demerara, 1.—French Guiana: Cayenne, 2.—Brazil: Pará, 1; Santo Antonio do Prata, Pará, 1; north side of Amazon, 1; Borba, Rio Madeira, 1.

***Buteo nitidus pallidus** (Todd).[1] SOUTHERN SHINING GOSHAWK.

Asturina nitida pallida Todd, Proc. Biol. Soc. Wash., **28**, p. 170, Nov. 29, 1915—Rio Surutú, Bolivia (type in the Carnegie Museum); Swann, Syn. List Accip., p. 55, 1919—Bolivia; Hellmayr, Nov. Zool., **28**, p. 184, 1921—Chiquitos, Bolivia (crit.); Swann, Syn. Accip., p. 90, 1922—Bolivia; idem, Monog. Bds. Prey, **1**, p. 433, 1930—lower Beni River, Bolivia; Laubmann, Wiss. Erg. Deuts. Gran Chaco Exp., Vögel, p. 103, 1930—Monte Grande, Santa Cruz, Bolivia; Peters, Bds. World, **1**, p. 241, 1931—eastern Bolivia; Gyldenstolpe, K. Svensk. Vetensk. Akad. Handl., (3), **23**, p. 52, 1945—Bolivia (Bresta, El Beni).

Falco striolatus (not *Astur striolatus* Cuvier) Wied, Beitr. Naturg. Bras., **3**, (1), p. 209, 1830—Estiva, eastern Brazil.

Astur nitidus (not *Falco nitidus* Latham) d'Orbigny, Voy. Amér. Mérid., Ois., p. 95, 1835—Chiquitos, Bolivia; Lafresnaye and d'Orbigny, Syn. Av., **1**, in Mag. Zool., **7**, cl. 2, p. 5, 1837—Chiquitos; Burmeister, Syst. Uebers. Th. Bras., **2**, p. 68, 1855—Nova Friburgo, Rio de Janeiro.

Asturina nitida Pelzeln, Verh. Zool. Bot. Ges. Wien, **12**, pp. 140, 172, 1862—part, Cuyabá, Caiçara, and Araguay, Brazil (soft parts); idem, Orn. Bras., **1**, p. 3, 1868—part, same localities; Sclater and Salvin, Proc. Zool. Soc. Lond., 1869, p. 130—part, Cuyabá, Araguay, and "southeastern Brazil"; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 203, 1874—part, spec. b, c, Bahia; Allen, Bull. Amer. Mus. N. H., **2**, p. 104, 1889—lower Beni River, Bolivia; idem, l.c., **5**, p. 142, 1893—Chapada, Matto Grosso; Ihering, Rev. Mus. Paul., **4**, p. 162, 1900—Cantagallo and Nova Friburgo, Rio de Janeiro; idem, Cat. Faun. Braz., **1**, p. 90, 1907—part, Matto Grosso, Bahia, and Rio de Janeiro; Reiser, Denks. Math.-Naturw. Kl. Akad. Wiss. Wien, **76**, p. 90, 1910—Piauhy (Pedrinha; Lagõa do Rio Fundu, below São Miguel, Rio Parnahyba); Grant, Ibis, 1911, p. 331—Puerto Maria, Paraguay; Dabbene, Bol. Soc. Physis, **2**, p. 428, 1916—Las Palmas, Chaco.

Asturina nitida nitida Swann, Syn. List Accip., p. 55, 1919—part, "southeastern" Brazil; idem, Syn. Accip., p. 89, 1922—part, "southeastern" Brazil; Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **12**, p. 459, 1929—Piauhy; Swann, Monog. Bds. Prey, **1**, p. 432, 1930—part, "southeastern" Brazil; Pinto, Rev. Mus. Paul., **20**, p. 51, 1936—Jaraguá, Rio das Almas,

[1] *Buteo nitidus pallidus* (Todd): Very similar to the nominate race, but paler throughout; dorsal surface not so dark, with the white bands wider and more prominent, particularly on pileum and hind neck; dark barring underneath narrower and less dusky.

Birds from the tableland of Brazil, while not quite as pale as Bolivian specimens, are decidedly nearer to *pallidus* than to *nitidus*, as represented by a series from Guiana and Amazonia. One from Rio Grande, Bolivia, is lighter than any of the Brazilian specimens, which vary *inter se* a good deal, but two others from the same region in Bolivia so closely approach certain individuals from Matto Grosso, that for the present we are not prepared to advocate any further subdivision.

Additional material examined.—Bolivia: Rio Grande, 1; Santa Cruz de la Sierra, 1; Chiquitos, 1.—Brazil: Cuyabá, Matto Grosso, 3; Caiçara, Matto Grosso, 1; Rio Araguay, Goyáz, 1; Bahia, 2; Pedrinha, Lagõa do Parnaguá, Piauhy, 2; below São Miguel, Rio Parnahyba, Piauhy, 1.

Goyáz; Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 440, 1936—Las Palmas, Chaco.

Asturina nitida (subsp.) Naumburg, Bull. Amer. Mus. N. H., **60**, p. 107, 1930—Matto Grosso.

Range.—Tableland of Brazil, from Piauhy south to Rio de Janeiro, Goyáz, and Matto Grosso; eastern Bolivia; Paraguay (Puerto Maria); northern Argentina (Las Palmas, Chaco).

Field Museum Collection.—3: Brazil (Rio São Miguel, Goyáz, 1); Bolivia, Santa Cruz (Buena Vista, 1; Cercado, 1).

Genus PARABUTEO Ridgway

Antenor (not Denys de Montfort, 1808) Ridgway, Proc. Bost. Soc. N. H., **16**, p. 63, May, 1873—type, by orig. desig., *Falco unicinctus* Temminck.

Parabuteo Ridgway, in Baird, Brewer, and Ridgway, Hist. N. Amer. Bds., **3**, pp. 248, 250, Jan., 1874—type, by orig. desig., *Buteo harrisi* Audubon.

Erythrocnema Sharpe, Cat. Bds. Brit. Mus., **1**, p. 84, after June 1, 1874—type, by monotypy, *Falco unicinctus* Temminck.

*Parabuteo unicinctus harrisi (Audubon). HARRIS'S HAWK.

Buteo harrisi Audubon, Bds. Amer. (folio), **4**, pl. 392, 1837; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 56, 1900—southern United States to Panama, Ecuador and Peru.

Falco harrisii Audubon, Orn. Biog., **5**, p. 30, 1839—between Bayou Sara and Natchez, Mississippi (type apparently lost).

Polyborus taeniurus Tschudi, Arch. Naturg., **10**, (1), p. 263, 1844—Peru (descr. of young; type in Neuchâtel Museum); idem, Unters. Faun. Peru., Orn., pl. 1, 1846.

Hypomorphnus unicinctus (not *Falco unicinctus* Temminck) Tschudi, Arch. Naturg., **10**, (1), p. 221, 1844—Peru; idem, Unters. Faun. Peru., Orn., p. 85, 1846—part, Sierra of Peru.

Craxirex unicinctus Baird, Rep. Expl. Surv. Pacif. R. R., **9**, p. 46, 1858—Texas (Brownsville, Oyster Point) and New Mexico; Dresser, Ibis, 1865, p. 329—Rio Grande Valley, Texas; Salvin, Proc. Zool. Soc. Lond., 1867, p. 158—Santa Fé, Veraguas; Orton, Amer. Natur., **5**, p. 624, 1871—Quito Valley, Ecuador.

Urubitinga unicincta Sclater, Proc. Zool. Soc. Lond., **27**, p. 147, 1859—Pallatanga, Ecuador; Sclater and Salvin, Ibis, 1859, p. 216—Guatemala; Pelzeln, Verh. Zool. Bot. Ges. Wien, **12**, p. 139, 1862—part, Peru; Sclater and Salvin, Proc. Zool. Soc. Lond., 1868, pp. 175, 569—Tambo Valley, Arequipa, Peru; Lawrence, Ann. Lyc. Nat. Hist. N. Y., **9**, p. 238, 1869—Puná Island, Ecuador; Duges, La Naturaleza, **1**, p. 138, 1876—Guanajuata, Mexico; Taczanowski, Proc. Zool. Soc. Lond., 1877, p. 329—Santa Lucia, Ecuador; idem, Orn. Pér., **1**, p. 106, 1884—Peru.

Spizigeranus unicinctus Sclater, Proc. Zool. Soc. Lond., **28**, p. 288, 1860—Babahoyo, Ecuador.

Asturina unicincta Schlegel, Mus. Pays-Bas, Asturinae, p. 2, 1862—part, No. 2, Mexico.

Craxirex harrisii Coues, Proc. Acad. Nat. Sci. Phila., 1866, p. 49—Colorado River.

Morphnus unicinctus Finsch, Verh. Naturw. Ver. Bremen, **2**, p. 363, 1870—Mazatlan, Mexico.

Craxirex unicinctus var. *harrisii* Lawrence, Mem. Bost. Soc. N. H., **2**, p. 302, 1874—Mazatlan, Tepic, Jalisco, and Colima.

Parabuteo unicinctus var. *harrisi* Ridgway, in Baird, Brewer, and Ridgway, Hist. N. Amer. Bds., **3**, p. 250, 1874 (crit.).

Erythrocnema unicincta Sharpe, Cat. Bds. Brit. Mus., **1**, p. 85, 1874 (in part); Sumichrast, La Naturaleza, **5**, p. 235, 1881—Tehuantepec and Tapanatepec, Oaxaca; Salvadori and Festa, Boll. Mus. Zool. Torino, **15**, No. 368, p. 30, 1900—Concepción, Chota, Ecuador.

Antenor harrisii Gurney, Ibis, 1875, p. 234 (crit.).

Antenor unicinctus β. harrisi Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, No. 2, pp. 162, 163, 1876—southern border of the United States, to Panama (monog.).

Antenor unicinctus var. *harrisi* Lawrence, Bull. U. S. Nat. Mus., **4**, p. 42, 1876—Tehuantepec City, Mexico; Merrill, Proc. U. S. Nat. Mus., **1**, p. 154, 1879—Fort Brown, Texas (breeding).

Antenor unicinctus harrisi Sennett, Bull. U. S. Geol. Geog. Surv. Terr., **5**, p. 419, 1879—lower Rio Grande Valley, Texas (nest and eggs).

Parabuteo unicinctus harrisi Nutting, Proc. U. S. Nat. Mus., **5**, p. 404, 1882—La Palma de Nicoya, Costa Rica; Belding, l.c., **5**, pp. 544, 548, 1883—San José to Miraflores, Lower California; Sennett, Auk, **4**, p. 26, 1887 (downy and juv. plumage); Zeledón, Anal. Mus. Nac. Costa Rica, **1**, p. 126, 1887—San José, Costa Rica; Cherrie, Auk, **9**, p. 328, 1892—San José, Costa Rica; Bendire, Life Hist. N. Amer. Bds., **1**, p. 202, pl. 6, figs. 3, 4 (eggs), 1892 (habits); Miller, Bull. Amer. Mus. N. H., **21**, p. 346, 1905—Elota and Escuinapa, Sinaloa; Carriker, Ann. Carnegie Mus., **6**, p. 454, 1910—Palo Verde de Guanacaste, Costa Rica; Phillips, Auk, **28**, p. 73, 1911—Matamoros and Alta Mira, Tamaulipas; Wiley, Condor, **19**, p. 142, 1917—Palo Verde, southeastern California (nesting); Chapman, Bull. Amer. Mus. N. H., **36**, p. 241, 1917—La Manuelita, Colombia; Rendahl, Ark. Zool., **12**, No. 8, p. 9, 1919—Pacora, Panama; Swann, Syn. List Accip., p. 18, 1919 (range); idem, Syn. Accip., p. 29, 1921 (range); idem, Monog. Bds. Prey, **1**, p. 164, 1925 (monog.); Griscom and Crosby, Auk, **42**, p. 534, 1925—Brownsville, Texas; Friedmann, l.c., p. 545, 1925—Brownsville; Chapman, Bull. Amer. Mus. N. H., **55**, p. 223, 1926—Chone, Puná Island, and Casanga, Ecuador (crit.); Grinnell, Univ. Calif. Pub. Zool., **32**, p. 108, 1928—Lower California; Miller, Condor, **32**, p. 210, 1930—Hot Poles, Colorado River, California; Peters, Bds. World, **1**, p. 240, 1931 (range); idem, Bull. Mus. Comp. Zool., **71**, p. 310, 1931—Almirante, Panama; van Rossem, Trans. San Diego Soc. N. H., **6**, p. 242, 1931—Tésia and ten miles north of Guaymas, Sonora; Griscom, Bull. Amer. Mus. N. H., **64**, p. 151, 1932—Guatemala (listed); idem, Bull. Mus. Comp. Zool., **78**, p. 299, 1935—Panama (Santa Fé, Veraguas, and Almirante); Bent, Bull. U. S. Nat. Mus., **167**, p. 142, 1937 (habits).

Antenor unicinctus Berlepsch and Stolzmann, Proc. Zool. Soc. Lond., 1892, p. 388—Lima and Yca, Peru; (?)iidem, Ornis, **13**, p. 99, 1906—Santa Ana, Urubamba, Peru.

Parabuteo unicinctus Chubb, Ibis, 1919, p. 281—part, Trujillo and Eten, western Peru; Dugand, Rev. Acad. Colomb. Cienc., Bogotá, **4**, p. 399, pl. 6, fig. 36, 1941—Colombia.

Parabuteo unicinctus unicinctus Lönnberg and Rendahl, Ark. Zool., **14**, No. 25, p. 34, 1922—near Zambiza, above Tumbaco, Cumbaya, and Pichincha, Ecuador; Dugand, Caldasia, **1**, p. 56, 1941—Guajira, Colombia.

Parabuteo unicinctus superior van Rossem,[1] Trans. San Diego Soc. Nat. Hist., **9**, No. 33, p. 377, Feb. 17, 1942—Laguna Dam, Lower Colorado River, Imperial County, California (type in collection of Donald R. Dickey, now in the University of California, Los Angeles); idem, Occ. Pap. Mus. Zool. Louisiana State Univ., **21**, p. 58, 1945—Sonora (distr.).

Range.—Southern California, southern Arizona, southern New Mexico, southern Texas, Louisiana, and Mississippi south through Lower California and Mexico; locally in Central America (Coban, Guatemala; San Rafael del Norte, Nicaragua; San José, La Palma de Nicoya, and Palo Verde de Guanacaste, Costa Rica; Santa Fé, Veraguas; Almirante and Pacora, Panama) to Colombia (La Manuelita), western Ecuador, and western Peru (Eten, Lambayeque; Trujillo, Libertad; Lima; Ica; Tambo Valley, Arequipa; Viña, Huamachuco, Marañón Valley);[2] accidental in Iowa and Kansas.

Field Museum Collection.—46: California (San Diego, 1); Texas (Cameron County, 6; Brownsville, 14; Nueces County, 3; Starr County, 1; Laredo, 1; Crystal City, 1); Mexico (Cerro Blanco,

[1] This race is proposed by van Rossem for birds from southern California, southern Arizona, Lower California, Sonora and Sinaloa. The distinctive characters are supposed to be larger size, coloration more blackish (less brownish) in adults; and in immatures under parts often approaching the uniform condition of adults instead of being streaked on a buffy ground. Dimensions of males are given as 335–355, females 360–390, as against 310–352 and 325–363 mm., respectively, in *P. u. harrisi*.

Specimens in Field Museum do not show the color characters. An adult male from San Diego, California, has a wing of only 330, but two adult females from Sonora measure 380 and 400 mm. as against 325, 345 and 356 in three other females from Texas.—B.C.

[2] The rich material in the British Museum shows that birds from Ecuador (Mount Corazón; Jima) and Peru (Eten, Lambayeque; Viña, Huamachuco, Marañón Valley) are *harrisi*. Adults from these countries agree with large series from Texas, Mexico, and Nicaragua (San Rafael del Norte) in their nearly unmarked blackish brown coloration, though one from Corazón by its barred thighs tends toward *unicinctus*. Also, according to Chapman, a specimen from La Manuelita, Colombia, agrees with others from Texas, and four from western Ecuador "are apparently to be referred to *harrisi* rather than *unicinctus*." A single adult from western Peru (locality not stated, but presumably Lima) is just as plain blackish brown as others from Texas but lacks the rufous suffusion on the rump. It is undoubtedly *harrisi*. The bird recorded by Berlepsch and Stolzmann, however, from Santa Ana, Urubamba, eastern Peru, is more likely to pertain to typical *unicinctus*.—C.E.H.

Sonora, 1; Camoa, Sonora, 3; Sabinas, Coahuila, 4; Zacatecas, 1; Apatzingan, Michoacan, 1); El Salvador (Hacienda Zapotitan, La Libertad, 1); Colombia, Cauca (El Tambo, 5; La Venta, 1); Ecuador (Guallabamba, Pichincha, 1; Cumbaya Valley, Pichincha, 1).

***Parabuteo unicinctus unicinctus** (Temminck). ONE-BANDED BUZZARD HAWK.

Falco unicinctus Temminck, Nouv. Rec. Pl. Col., livr. 53, pl. 313, Dec. 25, 1824—"dans les environs du Rio Grande, près Bõa Vista,[1] Brésil" (type in Paris Museum).

Astur unicinctus d'Orbigny, Voy. Amér. Mérid., Ois., p. 93, 1835—Corrientes and Valle Grande, Bolivia; Lafresnaye and d'Orbigny, Syn. Av., **1**, in Mag. Zool., **7**, cl. 2, p. 5, 1837—Corrientes; Fraser, Proc. Zool. Soc. Lond., **11**, p. 109, 1843—wooded parts of central Chile.

Buteo unicinctus Des Murs, in Gay, Hist. Fís. Pol. Chile, Zool., **1**, p. 216, 1847—Chile (habits); Boeck, Naumannia, 1855, p. 497—Valdivia, Chile; Philippi, Anal. Univ. Chile, **31**, p. 243, 1868—central provinces of Chile; (?)idem, Ornis, **4**, p. 158, 1888—Cana, Antofagasta; idem, Anal. Mus. Nac. Chile, **15**, p. 14, 1902—Chile (crit.); Housse, Rev. Chil. Hist. Nat., **29**, p. 142, 1925—San Bernardo, Santiago, Chile; idem, l.c., **33**, p. 243, 1929—Chile (crit.).

Asturina unicincta Burmeister, Syst. Uebers. Th. Bras., **2**, p. 82, 1855—Brazil; idem, Journ. Orn., **8**, p. 242, 1860—Mendoza; idem, Reise La Plata St., **2**, p. 436, 1861—Mendoza; Schlegel, Mus. Pays-Bas, Asturinae, p. 3, 1862—part, Nos. 1, 3, Chile and Buenos Aires; Doering, Period. Zool. Arg., **1**, p. 247, 1874—Rio Guayquiraro, Corrientes.

Morphnus unicinctus Cassin, in Gilliss, U. S. Astr. Exp., **2**, p. 174, 1855—Chile.

Urubitinga unicincta Sclater, Proc. Zool. Soc. Lond., **26**, p. 150, 1858—Chile (bill); Pelzeln, Verh. Zool. Bot. Ges. Wien, **12**, pp. 139, 181, 1862—part, Chile and Brazil (Rio de Janeiro, Sapitiba, Matto Grosso); idem, Reise Novara, Zool., **1**, Vögel, p. 6, 1865—Chile; Sclater, Proc. Zool. Soc. Lond., 1867, pp. 329, 338—Chile; Pelzeln, Orn. Bras., **1**, p. 3, 1868—Rio de Janeiro, Sapitiba, and [Villa Bella de] Matto Grosso, Brazil; Sclater and Salvin, Proc. Zool. Soc. Lond., 1868, p. 143—Conchitas, Buenos Aires; Reed, Anal. Univ. Chile, **49**, p. 558, 1877—Cauquenes, Colchagua, Chile; Gibson, Ibis, 1879, p. 411—Cape San Antonio, Buenos Aires; Salvin, Ibis, 1880, p. 362—Salta; Withington, Ibis, 1888, p. 469—Lomas de Zamora, Buenos Aires; Lönnberg, Ibis, 1903, p. 465—Colonia Créveaux, Tarija, Bolivia.

Craxirex unicinctus Germain, Proc. Bost. Soc. N. H., **7**, p. 309, 1861—Santiago, Chile (nesting habits; eggs).

Erythrocnema unicincta Sharpe, Cat. Bds. Brit. Mus., **1**, p. 85, 1874—part, Chile (Santiago, Valparaiso), Argentina (Buenos Aires), and Brazil (Bahia).

[1] Bõa Vista is an Indian village south of the Rio Paranahyba in western Minas Geraes, Comarca Desemboque (cf. A. de Saint-Hilaire, Voy. Intér. Brésil, **2**, (3), p. 266, 1848).

Hypomorphnus unicinctus Cabanis, Journ. Orn., **22**, p. 230, 1874—Cantagallo, Rio de Janeiro.

Antenor unicinctus a. unicinctus Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, No. 2, pp. 161, 162, 1876—part, Chile (Santiago) and Buenos Aires (monog.).

Antenor unicinctus Berlepsch, Ibis, 1884, p. 436—Angostura, Rio Orinoco, Venezuela; idem, Journ. Orn., **35**, p. 27, 1887—Lambaré, Paraguay; Sclater and Hudson, Arg. Orn., **2**, p. 63, 1889—Argentina (habits); Stempelmann and Schulz, Bol. Acad. Nac. Cienc. Córdoba, **10**, p. 396, 1890—Córdoba; Franzel, Journ. Orn., **39**, p. 114, 1891—Córdoba; Salvadori, Boll. Mus. Zool. Torino, **10**, No. 208, p. 20, 1895—Luque, Aios, and Villa Rica, Paraguay; idem, l.c., **12**, No. 292, p. 28, 1897—Caiza, Bolivia; Reed, Anal. Univ. Chile, **93**, p. 205, 1896—Chile; Lane, Ibis, 1897, p. 179—central and southern Chile; Ihering, Rev. Mus. Paul., **3**, p. 348, 1899—Piquete, São Paulo; idem, l.c., **4**, p. 162, 1900—Cantagallo, Rio de Janeiro; Albert, Anal. Univ. Chile, **108**, p. 269, 1901—Chile (descr.; habits); (?)Berlepsch and Stolzmann, Ornis, **13**, p. 99, 1906—Santa Ana, Peru; Berlepsch, Nov. Zool., **15**, p. 291, 1908 (no records from French Guiana).

Parabuteo unicinctus Allen, Bull. Amer. Mus. N. H., **5**, p. 146, 1893—Chapada, Matto Grosso; Lillo, Anal. Mus. Nac. Buenos Aires, **8**, p. 203, 1902—Tucumán; Bruch, Rev. Mus. La Plata, **11**, p. 251, 1904—Orán, Salta; Lillo, Rev. Letr. Cienc. Soc., **3**, No. 13, p. 61, 1905—Tucumán; Ihering, Cat. Faun. Braz., **1**, p. 87, 1907—São Paulo (Piquete) and Santa Catharina (Colonia Hansa); Penard, Vog. Guyana, **1**, p. 383, 1908—Surinam; Hartert and Venturi, Nov. Zool., **16**, p. 239, 1909—Tucumán; Lowe, Ibis, 1909, p. 322—Cariaco Peninsula, Venezuela; Chubb, l.c., 1910, p. 71—Sapucay, Paraguay; Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, pp. 242, 414, 1910—Argentina south to Chubut and Santa Cruz, Patagonia; Bertoni, Faun. Parag., p. 42, 1914—Paraguay; Snethlage, Bol. Mus. Goeldi, **8**, p. 127, 1914 (listed); Reed, Av. Prov. Mendoza, p. 20, 1916—Santa Rosa, Mendoza; Cherrie, Sci. Bull., Mus. Brookl. Inst., **2**, p. 342, 1916—Ciudad Bolivar, Orinoco (ex Berlepsch); Dabbene, El Hornero, **1**, p. 100, pl. 1, 1918—Avellaneda, Buenos Aires (nest); Sanzin, l.c., p. 149, 1918—Mendoza; Chubb, Ibis, 1919, p. 281—part, Charuplaya, Bolivia; Renard, El Hornero, **2**, p. 59, 1920—Cañuelas, Buenos Aires; Barros, Rev. Chil. Hist. Nat., **24**, p. 48, 1920—Nilahue, Curicó, Chile; Serié and Smyth, El Hornero, **3**, p. 44, 1923—Santa Elena, Entre Ríos; Giacomelli, l.c., p. 77, 1923—La Rioja; Marelli, Mem. Min. Obr. Publ. for 1922–23, p. 629, 1924—Prov. Buenos Aires; Ménégaux, Rev. Franç. d'Orn., 1925, p. 238—near Icaño, Santiago del Estero; Sztolcman, Ann. Zool. Mus. Pol. Hist. Nat., **5**, p. 123, 1926—Invernadinha, Paraná; Jaffuel and Pirion, Rev. Chil. Hist. Nat., **31**, p. 103, 1927—Marga-Marga Valley, Valparaiso, Chile; Pereyra, El Hornero, **4**, p. 25, 1927—Zelaya and Conhelo, Buenos Aires; Castellanos, l.c., **5**, p. 10, 1932—Valle de los Reartes, Córdoba.

Buteo elegans Philippi, Anal. Univ. Chile, **103**, pp. 665, 669, 1899—Chile (type in the National Museum, Santiago, Chile); idem, Arch. Naturg., **65**, (1), p. 169, 1899; idem, Anal. Mus. Nac. Chile, **15**, p. 10, pl. 7, 1902—

Santiago; Philippi B., El Hornero, **8**, p. 181, 1942 (type an immature male from Santiago).

Parabuteo unicinctus unicinctus Hussey, Auk, **33**, p. 389, 1916—near La Plata; Swann, Syn. List Accip., p. 17, 1919 (range); idem, Syn. Accip., p. 29, 1921 (range); Hellmayr, Nov. Zool., **28**, p. 184, 1921—Valle Grande, Bolivia; Swann, Monog. Bds. Prey, **1**, p. 162, 1925 (monog.); Friedmann, Bull. Mus. Comp. Zool., **68**, p. 160, 1927—Concepción, Tucumán; Naumburg, Bull. Amer. Mus. N. H., **60**, p. 106, 1930—Matto Grosso; Laubmann, Wiss. Erg. Deuts. Gran Chaco Exp., Vögel, p. 99, 1930—Villa Montes, Tarija, Bolivia; Peters, Bds. World, **1**, p. 240, 1931 (range); Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **19**, p. 277, 1932—Santiago to Valdivia, Chile; Barros, Rev. Chil. Hist. Nat., **38**, p. 140, 1934—Estero Peuco, Chile; Bullock, l.c., **39**, p. 240, 1935—Isla La Mocha, Chile; Pinto, Rev. Mus. Paul., **19**, p. 100, 1935—Corupéba, Bahia; Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 438, 1936 (syn.; range in Argentina); (?)Philippi B., Bol. Mus. Nac. Santiago, **16**, p. 49, 1938—Chinchorro, Tacna, Chile; Gyldenstolpe, K. Svensk. Vetensk. Akad. Handl., (3), **23**, p. 52, 1945—Bresta, El Beni, Bolivia.

Range.—Interior of Brazil, from Ceará and Matto Grosso south to Santa Catharina; eastern Bolivia (Charuplaya, La Paz; Valle Grande, Cochabamba; Tarija); (?)southeastern Peru (Santa Ana, Urubamba); central and southern Chile, from Valparaiso to Valdivia (one record from Cana, Antofagasta, and one from (?)Chinchorro, Tacna); northern Argentina, south to Mendoza, Córdoba, and Buenos Aires;[1] Paraguay; also scattered records from Venezuela (Cariaco; Cuidad Bolivar) and Surinam.[2]

Field Museum Collection.—11: Brazil (Quixada, Ceará, 1); Bolivia (Buena Vista, Santa Cruz, 1); Paraguay (195 km. west of Puerto Casado, 6); Chile (Lautaro, Cautin, 1; Angol, Bio-Bio, 1); Argentina (Tucumán, 1).

Genus LEUCOPTERNIS Kaup

Leucopternis Kaup, Isis, 1847, col. 210—type, by subs. desig. (Gray, Cat. Gen. Subgen. Bds., p. 3, 1855), *Falco melanops* Latham.

Pseudastur Blyth, Cat. Bds. Mus. Asiat. Soc., p. 24, 1849 [or 1852]—type, by monotypy, *Falco poecilonotus* Temminck=*Falco albicollis* Latham.

[1] Dabbene (Anal. Mus. Nac. Buenos Aires, **18**, 1910, p. 414) quotes Koslowsky as his authority for extending the range of this hawk to Chubut and Santa Cruz, Patagonia, where it has never been found by anybody else.

[2] Birds from Chile agree with others from Brazil (Rio de Janeiro and Matto Grosso). In adult plumage, this form evidently never loses the light spotting, particularly below, while the juvenile individuals are more heavily variegated with dark brown underneath than the corresponding stage of Harris's Hawk. The ranges of the two races need close study with the help of adequate series of breeding birds, the status of those nesting in different parts of Peru being by no means settled. It is, furthermore, quite possible that the stray individuals recorded from the Orinoco and Surinam may prove to be migrants from the north.

Morphnarchus Ridgway, Smiths. Misc. Coll., **72**, No. 4, p. 2, Dec. 6, 1920—type, by orig. desig., *Leucopternis princeps* Sclater.

Leucopternis albicollis ghiesbreghti (Du Bus). MEXICAN WHITE-COLLARED HAWK.

Buteo ghiesbreghti Du Bus, Esq. Orn., livr. 1, pl. 1, 1845—Hacienda de Mirador, Vera Cruz, Mexico (type in Brussels Museum); Sclater, Proc. Zool. Soc. Lond., **25**, p. 227, 1857—San Andrés Tuxtla, Vera Cruz; idem and Salvin, Ibis, 1859, p. 217—Pacific coast region; Sumichrast, Mem. Bost. Soc. N. H., **1**, p. 560, 1869—hot region of Vera Cruz.

Urubitinga ghiesbreghti Sharpe, Cat. Bds. Brit. Mus., **1**, p. 217, 1874—Mexico; Sumichrast, La Naturaleza, **15**, p. 236, 1881—Vera Cruz (Mirador, Huatusco, Uvero).

Leucopternis ghiesbreghti Gurney, Ibis, 1876, p. 470 (crit.; in part); Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, No. 2, p. 174, 1876—part, spec. from Guatemala and Mexico (Mirador); Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 82, 1900—part, Mexico, British Honduras, and Guatemala (Choctum, Medio Monte, Savanna Grande, Aguna); Swann, Syn. List Accip., p. 59, 1919 (in part); idem, Monog. Bds. Prey, **1**, p. 467, 1930 (in part).

Leucopternis ghiesbreghti ghiesbreghti Swann, Syn. Accip., p. 100, 1922—Mexico to Guatemala and "Honduras"; Bangs and Peters, Bull. Mus. Comp. Zool., **67**, p. 473, 1927—Presidio and Motzorongo, Vera Cruz, Mexico; Griscom, Bull. Amer. Mus. N. H., **64**, p. 158, 1932—Finca Sepur, Finca Sepacuite, and Secanquim, Guatemala.

Leucopternis albicollis ghiesbreghti Peters, Bds. World, **1**, p. 241, 1931 (range); Van Tyne, Misc. Publ., Mus. Zool. Univ. Mich., **27**, p. 16, 1935—Uaxactun and Chuntuquí, Petén, Guatemala.

Range.—Tropical zone of southern Mexico, from Vera Cruz and Oaxaca southward through Guatemala to British Honduras.[1]

***Leucopternis albicollis costaricensis** W. L. Sclater.[2] COSTA RICAN WHITE-COLLARED HAWK.

Leucopternis ghiesbreghti costaricensis W. L. Sclater, Bull. Brit. Orn. Cl., **39**, p. 76, April 9, 1919—Carrillo, Costa Rica (type in the British Museum); Swann, Syn. Accip., p. 100, 1922—"Guatemala" to Panama; Kennard and Peters, Proc. Bost. Soc. N. H., **38**, p. 449, 1928—Almirante, Panama; Griscom, Bull. Mus. Comp. Zool., **69**, p. 158, 1929—Cana, Panama; Peters, l.c., p. 417, 1929—Lancetilla, Honduras (crit.); idem, l.c., **71**, p. 310, 1931—Almirante and Boquete Trail, Panama; Griscom, l.c., **72**,

[1] Specimens from British Honduras are intermediate to *costaricensis*.

[2] *Leucopternis albicollis costaricensis* W. L. Sclater differs from the northern race by having the inner primaries and secondaries blotched or barred with black instead of plain white.

A good series from Nicaragua, Costa Rica, and Panama examined. According to Peters, birds from Honduras are typical of this form.

p. 314, 1932—Permé and Obaldia, Panama; Huber, Proc. Acad. Nat. Sci. Phila., **84**, p. 212, 1932—Eden, Nicaragua; Aldrich, Sci. Pub. Cleveland Mus. N. H., **7**, p. 43, 1937—Paracoté, Azuero, Panama.

Buteo ghiesbreghti (not of Du Bus) Lawrence, Ann. Lyc. Nat. Hist. N. Y., **7**, p. 288, 1861—Panama Railroad; Salvin, Proc. Zool. Soc. Lond., 1867, p. 158—Cordillera de Tolé, Veraguas.

Poecilopternis ghiesbrechti Frantzius, Journ. Orn., **17**, p. 368, 1869—Candelaria Mountains, Costa Rica.

Leucopternis ghiesbreghti Salvin, Proc. Zool. Soc. Lond., 1870, p. 215—Calovévora, Chitrá, and Bugaba, Panama; idem, Ibis, 1872, p. 323—Chontales, Nicaragua; Gurney, Ibis, 1876, p. 470 (crit.; in part); Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, No. 2, p. 174, 1876—part, spec. from Panama; Zeledón, Anal. Mus. Nac. Costa Rica, **1**, p. 126, 1887—Jiménez, Costa Rica; Ridgway, Proc. U. S. Nat. Mus., **10**, p. 592, 1887—Segovia River, Honduras; Richmond, l.c., **16**, p. 521, 1893—Rio Escondido, Nicaragua; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 82, 1900—Honduras, Nicaragua, Costa Rica, and Panama; Bangs, Proc. New Eng. Zool. Cl., **3**, p. 20, 1902—Bogaba, Chiriquí; Carriker, Ann. Carnegie Mus., **6**, p. 462, 1910—Costa Rica (Bonilla, La Vijagua, Tenorio, Guácimo, Guápiles, El Hogar, Miravalles); Stone, Proc. Acad. Nat. Sci. Phila., **70**, p. 250, 1918—Gatún, Panama; Rendahl, Ark. Zool., **12**, No. 8, p. 9, 1919—Siquirres, Costa Rica; Swann, Syn. List Accip., p. 59, 1919 (in part); idem, Monog. Bds. Prey, **1**, p. 467, 1930 (in part).

Urubitinga ghiesbreghti Boucard, Proc. Zool. Soc. Lond., 1878, p. 44—Naránjo, Costa Rica.

Leucopternis albicollis costaricensis Peters, Bds. World, **1**, p. 241, 1931 (range); Griscom, Bull. Mus. Comp. Zool., **78**, p. 299, 1935—Panama; Dugand, Caldasia, **1**, p. 56, 1941—Rio Jurado, Choco, Colombia.

Range.—Tropical zone of Honduras to eastern Panama (Darien) and northwestern Colombia (Rio Jurado).

Field Museum Collection.—8: Nicaragua (San Emilio, Rivas, 1; Matagalpa, 1); Costa Rica (Villa Quesada, Alajuela, 1); Panama (Punta Rincon, Colon, 1; Puerto Obaldia, Darien, 4).

Leucopternis albicollis occidentalis Salvin.[1] WESTERN WHITE-COLLARED HAWK.

Leucopternis occidentalis Salvin, Ibis, (3), **6**, p. 496, Oct., 1876—"Province of Loja or Puná Island," Ecuador (type now in the British Museum, examined); Chapman, Bull. Amer. Mus. N. H., **55**, p. 234, 1926—Alamor, Celica, Salvias, Las Piñas, Rio Pullango, Cebollal, Guainché, and Pichincha, Ecuador.

[1] *Leucopternis albicollis occidentalis* Salvin differs from the nominate race by mostly plumbeous (instead of white) pileum, less blackish upper parts, and narrower black subterminal tail-band.

The type is the only specimen we have seen of this well-marked form.

Leucopternis albicollis occidentalis Swann, Syn. List Accip., p. 59, 1919 (chars.; range); idem, Syn. Accip., p. 100, 1922—western Ecuador and "Colombia"; idem, Monog. Bds. Prey, **1**, p. 466, 1930 (monog.); Peters, Bds. World, **1**, p. 242, 1931—western Ecuador.

Range.—Tropical and Subtropical zones of western Ecuador.

***Leucopternis albicollis albicollis** (Latham). WHITE-COLLARED HAWK.

Falco albicollis Latham, Ind. Orn., **1**, p. 36, 1790—based on "White-necked Falcon" Latham, Gen. Syn. Bds., Suppl., p. 30, Cayenne.

Falco picatus Shaw, Gen. Zool., **7**, (1), p. 167, 1809—based on "White-necked Falcon" Latham, Gen. Syn. Bds., Suppl., p. 30, Cayenne.

Buteo melanonotus Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **4**, p. 472, 1816—Cayenne.

Falco poecilonotus (Cuvier MS.) Temminck, Nouv. Rec. Pl. Col., livr. 2, pl. 9, Sept., 1820—French Guiana (location of type not stated).

Buteo melanotus Vieillot, Tabl. Enc. Méth., Orn., livr. **93**, p. 1221, 1823—Cayenne (type in Paris Museum; cf. Pucheran, Rev. Mag. Zool., (2), **2**, p. 84, 1850).

Asturina albicollis Kaup, Isis, 1847, col. 210—Cayenne (descr.); idem, Contr. Orn., 1850, p. 68 (diag.); Schlegel, Mus. Pays-Bas, Asturinae, p. 9, 1862—"Mexico" (errore), Cayenne, and Surinam.

Asturina poecilinotus Cabanis, in Schomburgk, Reisen Brit. Guiana, **3**, "1848," p. 737, 1849—coastal forests.

Leucopternis albicollis Pelzeln, Verh. Zool. Bot. Ges. Wien, **12**, pp. 140, 183, 1862—Cayenne and Brazil (Cachoeira da Bananeira and Borba, Rio Madeira; Forte do Rio Branco); idem, Orn. Bras., **1**, p. 3, 1868—Cachoeira da Bananeira, Borba, and Forte do Rio Branco, Brazil; Finsch, Proc. Zool. Soc. Lond., 1870, p. 555—Trinidad; Salvin, Ibis, 1872, p. 242 (range); Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, No. 2, p. 176, 1876 (monog.); Salvin, Ibis, 1886, p. 74—Camacusa, British Guiana; W. L. Sclater, l.c., 1887, p. 319—Seseeka, Ari-pia-caru, and Pomeroon River, British Guiana; Allen, Bull. Amer. Mus. N. H., **5**, p. 146, 1893—Chapada, Matto Grosso; Salvadori and Festa, Boll. Mus. Zool. Torino, **15**, No. 368, p. 31, 1900—Gualaquiza, Ecuador; Robinson and Richmond, Proc. U. S. Nat. Mus., **24**, p. 168, 1901—San Julián, Venezuela; Berlepsch and Stolzmann, Ornis, **13**, p. 124, 1906—Rio Cadena, Marcapata, Peru; Hellmayr, Nov. Zool., **13**, p. 382, 1906—Santo Antonio do Prata, Pará; Ihering, Cat. Faun. Braz., **1**, p. 92, 1907 (range); Cherrie, Sci. Bull., Mus. Brookl. Inst., **1**, p. 370, 1908—Carenage, Trinidad; Berlepsch, Nov. Zool., **15**, p. 292, 1908—French Guiana (Cayenne, Ouanary); Beebe, Zoologica (N.Y.), **1**, p. 81, 1909—La Brea, Orinoco Delta, Venezuela; Hellmayr, Nov. Zool., **17**, p. 412, 1910—Borba and Bananeira, Rio Madeira; idem, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **26**, No. 2, p. 96, 1912—Santo Antonio do Prata, Pará; idem and Seilern, Arch. Naturg., **78**, A, Heft 5, p. 158, 1912—Las Quiguas, Carabobo, Venezuela; Stone, Proc. Acad. Nat. Sci. Phila., **65**, p. 195, 1913—Cariaquito, Paria,

Venezuela; Snethlage, Bol. Mus. Goeldi, **8**, p. 134, 1914—Rio Capim, Rio Tocantins, and Maranhão, Brazil; Chubb, Bds. Brit. Guiana, **1**, p. 250, 1916—Ituribisi River, Abary River, Mazaruni, Ourumee, etc.; Bangs and Penard, Bull. Mus. Comp. Zool., **62**, p. 37, 1918—Lelydorp, Surinam; Chubb, Ibis, 1919, p. 283—Rio Perené, Junín, Peru, and Sarayacu, Ecuador; Chapman, Bull. Amer. Mus. N. H., **55**, p. 234, 1926—below San José, Ecuador; Snethlage, Bol. Mus. Nac. Rio de Janeiro, **2**, No. 6, p. 68, 1926—Tury-assú, Maranhão; Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **12**, p. 462, 1929—Tury-assú (ex Snethlage); Berlioz, Bull. Mus. Hist. Nat. Paris, (2), **4**, p. 237, 1932—Sarayacu, Ecuador.

Buteo albicollis Taylor, Ibis, 1864, p. 79—Trinidad.

Buteo poecilinotus Léotaud, Ois. Trinidad, p. 7, 1866—Trinidad.

Urubitinga albicollis Sharpe, Cat. Bds. Brit. Mus., **1**, p. 216, 1874 (monog.); Ménégaux, Bull. Mus. Hist. Nat. Paris, **10**, p. 108, 1904—Ouanary, French Guiana; Hellmayr, Nov. Zool., **13**, p. 46, 1906—Chaguanas, Trinidad.

Leucopternis albicollis albicollis Swann, Syn. List Accip., p. 59, 1919 (chars.; range); idem, Syn. Accip., p. 99, 1922 (range); idem, Monog. Bds. Prey, **1**, p. 465, 1930 (monog.); Naumburg, Bull. Amer. Mus. N. H., **60**, p. 110, 1930—Matto Grosso; Peters, Bds. World, **1**, p. 241, 1931 (range); Belcher and Smooker, Ibis, 1934, p. 591—Trinidad; Roberts, Trop. Agric., **11**, p. 89, 1934—Trinidad; Dugand, Caldasia, **1**, p. 56, 1941—Florencia, Caqueta, Colombia.

Range.—Island of Trinidad, Venezuela, and the Guianas west to eastern Colombia (Caqueta), eastern Ecuador (Gualaquiza, Sarayacu, below San José), eastern Peru (Juanfué, Rio Huallaga; Rio Perené, Junín; Rio Cadena, Marcapata) and south through Amazonian Brazil to northern Maranhão (Tury-assú), Matto Grosso (Chapada) and eastern Bolivia (Rio Surutu).

Field Museum Collection.—12: Ecuador, Oriente (Cutucú, 2; Cerro Galera, 1); British Guiana (Head Boundary Camp, Itabu Creek, 1); Dutch Guiana (King Frederich W. IV Falls, Courantyne River, 1); Brazil (Labrea, Rio Purús, 2; near Santarem, Pará, 1; Piquiatuba, Pará, 1; Monte Alegre, Pará, 1; Aruan, Pará, 1); Bolivia (Rio Surutu, Santa Cruz, 1).

Leucopternis polionota (Kaup).[1] MANTLED HAWK.

[*Buteo*] *polionotus* Kaup,[2] Isis, 1847, col. 212—"South America"=São Paulo, Brazil (type in British Museum).

Asturina polionotus Kaup, Contr. Orn., 1850, p. 69 (diag.).

[1] *Leucopternis polionota* (Kaup) may prove to be conspecific with *L. albicollis*, but its taxonomic status probably should not be changed until its relationship to the little-known *L. lacernulata* has been satisfactorily determined.

[2] *Buteo polionotus* G. R. Gray (Cat. Accip. Brit. Mus., p. 17, 1844) is a nomen nudum.

Leucopternis palliata (Natterer MS.) Pelzeln, Sitz.-Ber. Akad. Wiss. Wien, **44**, p. 11, 1861—Ypanemá, São Paulo, Brazil (type in Vienna Museum examined); idem, Verh. Zool. Bot. Ges. Wien, **12**, pp. 141, 184, 1862—Ypanemá (soft parts); idem, Orn. Bras., **1**, p. 3, 1868—Ypanemá; Sclater and Salvin, Exot. Orn., pp. 97, 122, pl. 49, 1868—Ypanemá and vicinity of Rio de Janeiro; Salvin, Ibis, 1872, p. 242—southern Brazil; Berlepsch, Journ. Orn., **21**, p. 291, 1873—Blumenau, Santa Catharina (crit.); Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, No. 2, p. 175, 1876—"Maceo, Amazonia" (=Maceió, Alagoas), Brazil (monog.); Ihering, Rev. Mus. Paul., **3**, p. 356, 1899—São Paulo; idem, Ann. Est. Rio Grande do Sul, **16**, p. 140, 1899—Rio Grande do Sul; Bertoni, Anal. Cient. Parag., **1**, No. 3, p. 7, 1904—Alto Paraná (up to Caaguazú), Paraguay; Ihering, Cat. Faun. Braz., **1**, p. 93, 1907—São Paulo and Santa Catharina (Colonia Hansa); Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 417, 1910—Alto Parana; Bertoni, Faun. Parag., p. 43, 1914—Iguassú and Puerto Bertoni, Paraguay; Swann, Syn. List Accip., p. 59, 1919 (chars.; range).

Asturina melanonota (not *Buteo melanonotus* Vieillot) Schlegel, Mus. Pays-Bas, Asturinae, p. 10, 1862—"Mexico," errore (diag.).

Urubitinga palliata Sharpe, Cat. Bds. Brit. Mus., **1**, p. 218, 1874—Brazil.

Leucopternis polionota Swann, Syn. Accip., p. 100, 1922—southern Brazil (chars.); idem, Monog. Bds. Prey, **1**, p. 469, 1930—southern Brazil and Paraguay (monog.); Pinto, Rev. Mus. Paul., **19**, p. 103, 1935—Rio Jucuruçú, Bahia, and Marianna, Minas Geraes; Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 441, 1936—Iguazú, Misiones (synon.).

Leucopternis (albicollis?) polionota Peters, Bds. World, **1**, p. 242, 1931 (range).

Range.—Eastern Brazil, from Alagoas (Maceió) and Bahia (Rio Jucuruçú) through Minas Geraes (Marianna), Rio de Janeiro, and São Paulo (Ypanemá) to Santa Catharina (Blumenau, Colonia Hansa, Joinville), (?)Rio Grande do Sul, and Paraguay (Alto Paraná).[1]

Leucopternis lacernulata (Temminck).[2] WHITE-NECKED HAWK.

Falco lacernulatus Temminck, Nouv. Rec. Pl. Col., livr. 74, pl. 437, Sept. 22, 1827—Brazil, coll. Delalande (fils) and A. de Saint-Hilaire;=vicinity of Rio de Janeiro (type in Paris Museum).

Falco skotopterus Wied, Beitr. Naturg. Bras., **3**, (1), p. 204, 1830—Villa Viçoza, Rio Peruhype, southern Bahia, and Barra do Jucú, Espirito Santo

[1] *Material examined.*—Brazil: Ypanemá, São Paulo, 1; Joinville, Santa Catharina, 5.

[2] *Leucopternis lacernulata* (Temminck) closely resembles *L. polionota*, but is considerably smaller, and differs, besides, by distinctly grayish pileum and hindneck, by having a broad subterminal band of slaty black, followed by a narrow white apical margin, on the rectrices, and by the plain white, not black-banded inner web of the outer primaries. Wing, 290–315; tail, about 175.

A very little known species, of which only a few specimens exist in collections. The immature bird with its streaked head exhibits certain analogies with *L. melanops*, to which, in spite of its superficial resemblance with *L. polionota*, it

(type, from Espirito Santo, in Wied Collection, now in the American Museum of Natural History, New York; cf. Allen, Bull. Amer. Mus. N. H., **2**, p. 267, 1889).

Asturina scotopterus Kaup, Isis, 1847, col. 211—Brazil (descr., excl. of synon. *Buteo melanonotus* Vieill. and *Falco poecilinotus* Temm.); idem, Contr. Orn., 1850, p. 69 (diag.).

Falco scotopterus Burmeister, Reise Bras., p. 290, 1853—Rio Cagado (Rio da Pomba), Minas Geraes.

Buteo scotopterus Sclater, Proc. Zool. Soc. Lond., **23**, p. 134, 1855—"Bogotá"; Burmeister, Syst. Uebers. Th. Bras., **2**, p. 51, 1855—Rio Cagado, tributary of the Rio da Pomba, Minas Geraes.

Leucopternis scotoptera Pelzeln, Verh. Zool. Bot. Ges. Wien, **12**, pp. 141, 184, 1862—Registo do Sai, Rio de Janeiro (soft parts); idem, Orn. Bras., **1**, p. 3, 1868—Registo do Sai; Salvin, Ibis, 1872, p. 242—Brazil; Berlepsch, Journ. Orn., **21**, p. 290, 1873—Blumenau, Santa Catharina (crit.).

Asturina scotoptera Schlegel, Mus. Pays-Bas, Asturinae, p. 11, 1862—Brazil and "Guiana" (descr.).

Urubitinga lacernulata Sharpe, Cat. Bds. Brit. Mus., **1**, p. 218, 1874—Brazil (Bahia) and "Bogotá."

Leucopternis lacernulata Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, No. 2, p. 175, 1874—southern Brazil to "Bogotá" (monog.); Ihering, Rev. Mus. Paul., **3**, p. 356, 1899—Rio de Janeiro to Santa Catharina; idem, l.c., **4**, p. 162, 1900—Cantagallo, Rio de Janeiro; idem, Cat. Faun. Braz., **1**, p. 93, 1907—São Paulo (Iguapé) and Espirito Santo (Páo Gigante); Swann, Syn. List Accip., p. 60, 1919—southern Brazil (diag.); idem, Syn. Accip., p. 101, 1922 (diag.); idem, Monog. Bds. Prey, **1**, p. 470, 1930 (monog.); Peters, Bds. World, **1**, p. 242, 1931 (range).

Range.—Wooded region of southeastern Brazil, from extreme southern Bahia (Villa Viçoza, Rio Peruhype) through Espirito Santo (Barra do Rio Jucú, Páo Gigante), eastern Minas Geraes (Rio Cagado, Rio da Pomba), Rio de Janeiro (Registo do Sai, Cantagallo), and São Paulo (Iguapé) to Santa Catharina (Blumenau, Joinville).

*Leucopternis melanops (Latham). BLACK-FACED HAWK.

Falco melanops Latham, Ind. Orn., **1**, p. 37, 1790—based on "Streaked Falcon" Latham, Gen. Syn. Bds., Suppl., p. 34, Cayenne (type in Leverian Museum);[1] Temminck, Nouv. Rec. Pl. Col., livr. 18, pl. 105, Jan., 1822—Guiana.

Asturina melanops Kaup, Isis, 1847, col. 210—Guiana (descr.); Cabanis, in Schomburgk, Reisen Brit. Guiana, **3**, "1848," p. 737, 1849—savannas;

may indeed be more nearly related. This hawk appears to be restricted to southeastern Brazil, the localities "Bogotá" and Guiana being obviously erroneous.

Material examined.—Brazil: Registo do Sai, Rio de Janeiro, 1; Joinville, Santa Catharina, 2; unspecified, 2.

[1] This specimen did not come to the Vienna Museum.

Kaup, Contr. Orn., 1850, p. 68 (diag.); Schlegel, Mus. Pays-Bas, Asturinae, p. 10, 1862—"Chile" and Cayenne (descr.).

Leucopternis melanops Pelzeln, Verh. Zool. Bot. Ges. Wien, **12**, pp. 140, 183, 1862—Barra do Rio Negro and "Pará," Brazil (soft parts); idem, Orn. Bras., **1**, p. 3, 1868—same localities; Sclater and Salvin, Exot. Orn., p. 122, 1868—Guiana and Amazonia; Salvin, Ibis, 1872, p. 242 (range); Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, No. 2, p. 177, 1874 (monog.); Salvin, Ibis, 1886, p. 75—River Atapurau, British Guiana; Ihering, Cat. Faun. Braz., **1**, p. 93, 1907 (range); Berlepsch, Nov. Zool., **15**, p. 292, 1908—French Guiana (Cayenne, Saint Georges d'Oyapock); Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **26**, No. 2, p. 96, 1912—"Pará" (ex Pelzeln); Snethlage, Bol. Mus. Goeldi, **8**, p. 134, 1914 (range); Chubb, Bds. Brit. Guiana, **1**, p. 251, 1916—upper Takutu Mountains, Ituribisi River, Bartica, Tiger Creek, and Camarang River; Swann, Syn. List Accip., p. 60, 1919 (chars.; range); idem, Syn. Accip., p. 101, 1922 (chars.; range); Chapman, Bull. Amer. Mus. N. H., **55**, p. 235, 1926—Rio Suno, Ecuador; Swann, Monog. Bds. Prey, **1**, p. 472, 1930 (monog.); Peters, Bds. World, **1**, p. 242, 1931 (range).

Urubitinga melanops Sharpe, Cat. Bds. Brit. Mus., **1**, p. 220, 1874 (monog.); Ménégaux, Bull. Mus. Hist. Nat. Paris, **10**, p. 108, 1904—St. Georges d'Oyapock, French Guiana.

Range.—The Guianas, south to the north bank of the lower Amazon (Manáos,[1] west to eastern Ecuador [Rio Suno]).[2]

Field Museum Collection.—5: British Guiana (Rockstone, 1); Brazil (Rio Curi Curari, Amazonas, 1; Igarape Aniba, Amazonas, 1; Obidos, Pará, 1; Caxiricatuba, Rio Tapajoz, 1).[3]

*Leucopternis kuhli Bonaparte.[4] WHITE-BROWED HAWK.

Leucopternis kuhli Bonaparte, Consp. Gen. Av., **1**, (1), p. 19, June (or March), 1850—no locality stated,=vicinity of Pará, Brazil (type in British Mu-

[1] Pelzeln (Verh. Zool. Bot. Ges. Wien, **12**, p. 183, 1862) mentions as second locality "Pará," but adds that the specimen from this place is missing in the Vienna Museum. We cannot help thinking that the entry of the Pará bird under No. 925 (*L. melanops*) in Natterer's manuscript was made by mistake, and should have gone to his No. 879 (*L. kuhli*). It will be remembered that the last-named species is the one that has been variously obtained in the Pará region, while *L. melanops* has never been found south of the Amazon River.

[2] *Additional material examined.*—French Guiana: Saint Georges d'Oyapock, 1.—British Guiana (various localities), 4.—Brazil: Manáos, 1.

[3] This is a juvenile bird and was received from the collector A. M. Olalla in a shipment of birds from the Rio Tapajoz. A mistake probably has been made in the locality, as this species has never before been taken south of the Amazon.

[4] *Leucopternis kuhli* Bonaparte is nearly allied to, and probably the southern representative of, *L. melanops*, differing principally by the mainly blackish slate coloration of the pileum and hindneck, the absence of the white spots on wing coverts and scapulars, and the possession of conspicuous white superciliaries.

Additional material examined.—Brazil: Pará, 1; Igarapé-Assú, 2; Santo Antonio do Prata, 1; Borba, Rio Madeira, 1; Maroins, Rio Machados, 1.

seum); Hellmayr, Nov. Zool., **13**, p. 382, 1906—Santo Antonio do Prata and Igarapé-Assú, Pará (crit.); Ihering, Cat. Faun. Braz., **1**, p. 93, 1907 (range); Hellmayr, Nov. Zool., **17**, p. 412, 1910—Maroins, Rio Machados, Rio Madeira; idem, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **26**, No. 2, p. 96, 1912—Pará, Santo Antonio, and Igarapé-Assú; Snethlage, Bol. Mus. Goeldi, **8**, p. 134, 1914—Pará and Peixe-Boi, Pará; Swann, Syn. List Accip., p. 60, 1919—Brazil (chars.); idem, Syn. Accip., p. 101, 1922—Amazonia (chars.); idem, Monog. Bds. Prey, **1**, p. 471, 1930 (monog.); Peters, Bds. World, **1**, p. 242, 1931 (range).

Leucopternis kaupi Bonaparte, Rev. Mag. Zool., (2), **2**, p. 481, Sept., 1850—South America (type in the British Museum);[1] Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, No. 2, p. 177, 1876 (monog.); Taczanowski, Orn. Pér., **1**, p. 117, 1884—"Chamicuros," Peru.

Leucopternis superciliaris Pelzeln, Sitzungsber. Akad. Wiss. Wien, **44**, p. 10, 1861—Borba, Rio Madeira (type in Vienna Museum, examined); idem, Verh. Zool. Bot. Ges. Wien, **12**, pp. 140, 183, 1862—Borba (Rio Madeira) and Pará (soft parts); Sclater and Salvin, Proc. Zool. Soc. Lond., 1867, p. 589—Pará; iidem, Exot. Orn., p. 75, pl. 38, 1867—Pará and Borba; Pelzeln, Orn. Bras., p. 3, 1868—Borba and Pará; Salvin, Ibis, 1872, p. 242—Amazonia; Sclater and Salvin, Proc. Zool. Soc. Lond., 1873, p. 302—Santa Cruz, Peru.

Asturina superciliaris Schlegel, Mus. Pays-Bas, Asturinae, p. 12, 1862—Pará.

Urubitinga kaupi Sharpe, Cat. Bds. Brit. Mus., **1**, p. 219, 1874—vicinity of Pará.

Range.—Brazil, south of the Amazon, from the Pará region to the Rio Madeira, south to the Rio Machados (Maroins), and the adjoining section of eastern Peru (Santa Cruz, lower Huallaga).

Field Museum Collection.—2: Brazil, Pará (Utinga Matta, 1; Piquiatuba, 1).

*Leucopternis semiplumbea Lawrence. SEMI-PLUMBEOUS HAWK.

Leucopternis semiplumbeus(*a*) Lawrence, Ann. Lyc. Nat. Hist. N. Y., **7**, p. 288, 1861—Atlantic side of the Isthmus of Panama along the line of the Panama Railroad (type in coll. of Geo. N. Lawrence, now in the American Museum of Natural History, New York); idem, l.c., **9**, p. 133, 1868—"Val"=Valsa, Costa Rica; Sclater and Salvin, Exot. Orn., p. 121, pl. 61, 1868—Valsa, Costa Rica; Frantzius, Journ. Orn., **17**, p. 368, 1869—Costa Rica; Salvin, Ibis, 1872, p. 243—Costa Rica and Panama; Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, No. 2, p. 177, 1876—Panama and Costa Rica (Old Harbor, Talamanca) (monog.); Sclater and Salvin, Proc. Zool. Soc. Lond., 1879, p. 540—Remedios, Colombia; Ridgway, Proc. U. S. Nat. Mus., **10**, p. 592, 1887—Segovia River, Honduras; Zeledón, Anal. Mus. Nac. Costa Rica, **1**, p. 126, 1887—Talamanca, Costa Rica; Salvadori and Festa, Boll. Mus. Zool. Torino, **14**, No. 339, p. 10, 1899—Laguna della Pita and Punta de Sabana, Darien; Salvin and Godman, Biol. Centr.-

[1] Based on the same specimen which served as type of *L. kuhli*.

Amer., Aves, 3, p. 84, 1900—Honduras (Segovia River), Costa Rica (Valsa, Talamanca), Panama, and Colombia; Hartert, Nov. Zool., 9, p. 605, 1902—San Javier, Prov. Esmeraldas, Ecuador; Carriker, Ann. Carnegie Mus., 6, p. 463, 1910—Costa Rica (Guácimo, Cariblanco de Sarapiquí, Rio Sícsola, El Hogar); Hellmayr, Proc. Zool. Soc. Lond., 1911, p. 1204—Juntas de Tamaná, Colombia; Chapman, Bull. Amer. Mus. N. H., 36, p. 247, 1917—Bagado and Los Cisneros, Colombia; Rendahl, Ark. Zool., 12, No. 8, p. 9, 1919—Bitéi, Talamanca, Costa Rica; Swann, Syn. List Accip., p. 60, 1919 (chars.; range); idem, Syn. Accip., p. 102, 1922—Ecuador to Nicaragua (chars.); Chapman, Bull. Amer. Mus. N. H., 55, p. 235, 1926—Ecuador; Swann, Monog. Bds. Prey, 1, p. 473, 1930 (monog.); Peters, Bds. World, 1, p. 242, 1931 (range); idem, Bull. Mus. Comp. Zool., 71, p. 310, 1931—Almirante and Changuinola, Panama; Griscom, l.c., 72, p. 314, 1932—Permé and Ranchon, Panama; idem, l.c., 78, p. 300, 1935—Caribbean lowlands of Panama; Dugand, Rev. Acad. Colomb. Cienc., Bogotá, 4, p. 399, 1941—Colombia.

Urubitinga semiplumbea Sharpe, Cat. Bds. Brit. Mus., 1, p. 220, 1874 (monog.).

Range.—Caribbean lowlands of Honduras (Segovia River), Nicaragua, Costa Rica, and Panama south through Pacific Colombia (east to Remedios, Antioquia) to northwestern Ecuador.[1]

Field Museum Collection.—4: Panama (Port Obaldia, Darien, 1); Colombia (Rio Jurado, Choco, 1; La Costa, El Tambo, Cauca, 1); Ecuador (Rio Cayapas, Esmeraldas, 1).

***Leucopternis schistacea schistacea** (Sundevall). SLATE-COLORED HAWK.

Asturina schistacea Sundevall, Öfvers. Vetensk.-Akad. Förhandl., 7, No. 5, p. 132, note 3, May, 1850—Brazil (type in Stockholm Museum; cf. Gyldenstolpe, Ark. Zool., 19, A, No. 1, p. 90, 1926); Schlegel, Mus. Pays-Bas, Asturinae, p. 8, 1862—Pará and Cayenne.

Morphnus schistaceus Sclater,[2] Proc. Zool. Soc. Lond., 25, p. 261, 1857—Rio Javarri.

Urubitinga schistacea Sclater, Proc. Zool. Soc. Lond., 26, p. 128, 1858—Rio Javarri and "interior of Bolivia" (descr.); idem, Trans. Zool. Soc. Lond., 4, (6), p. 261, pl. 58, 1858—same localities (descr.; crit.); Pelzeln, Verh. Zool. Bot. Ges. Wien, 12, pp. 138, 179, 1862—Borba, Rio Madeira (descr.; soft parts); Sclater and Salvin, Proc. Zool. Soc. Lond., 1866, p. 198—Cashaboya, Rio Ucayali, Peru; iidem, l.c., 1867, p. 979—Pebas, Peru; Pelzeln, Orn. Bras., 1, p. 2, 1868—Borba, Rio Madeira, and Barra do Rio Negro, Brazil; Salvin, Ibis, 1872, p. 242—Peru (Pebas, Cashaboya, Rio

[1] *Additional material examined.*—Costa Rica: Guácimo, 1.—Panama (unspecified), 1.—Colombia: Juntas, Rio Tamaná, 1; Remédios, 1.—Ecuador: San Javier, Prov. Esmeraldas, 1.

[2] The young bird from Santecomapam, near San Andres Tuxtla, Vera Cruz, Mexico, recorded by Sclater (Proc. Zool. Soc. Lond., 25, p. 227, 1857) under *M. schistaceus*, cannot possibly refer to the present species of purely Amazonian distribution.

Javarri) and Colombia ("Bogotá"); Layard, Ibis, 1873, p. 395—Pará, Brazil; Sclater and Salvin, Proc. Zool. Soc. Lond., 1873, p. 302—Peru (Rio Javarri, Cashiboya, Pebas); Sharpe, Cat. Bds. Brit. Mus., **1**, p. 216, 1874—upper Ucayali, Peru; Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, No. 2, p. 172, 1876—Pebas, Peru (monog.); Taczanowski, Orn. Pér., **1**, p. 109, 1884—Peru (part, Rio Javarri, Cashiboya, Pebas); Goeldi, Ibis, 1903, p. 497—Rio Capim, Pará; Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **26**, No. 2, p. 96, 1912—Rio Capim, Pará; Snethlage, Bol. Mus. Goeldi, **8**, p. 133, 1914—Pará and Maracá, Brazil; Chapman, Bull. Amer. Mus. N. H., **36**, p. 247, 1917—Barrigon, Colombia.

Leucopternis schistacea Ihering, Rev. Mus. Paul., **6**, p. 450, 1905—Rio Juruá, Brazil; idem, Cat. Faun. Braz., **1**, p. 92, 1907—Rio Juruá; Hellmayr, Nov. Zool., **14**, p. 406, 1907—Humaytá, Rio Madeira; Berlepsch, l.c., **15**, p. 292, 1908—Cayenne (ex Schlegel); Hellmayr, l.c., **17**, p. 412, 1910—Humaytá and Borba, Rio Madeira; Chapman, Bull. Amer. Mus. N. H., **55**, p. 234, 1926—Rio Suno, Ecuador; Peters, Bds. World, **1**, p. 242, 1931 (range); Bond and de Schauensee, Proc. Acad. Nat. Sci. Phila., **95**, p. 178, 1943—Rio Chapare, Bolivia.

Leucopternis schistacea schistacea Swann, Syn. List Accip., p. 59, 1919 (chars.; range); idem, Syn. Accip., p. 99, 1922 (chars.; range); idem, Monog. Bds. Prey, **1**, p. 463, 1930 (monog.); Gyldenstolpe, K. Svensk. Vetensk. Akad. Handl., (3), **22**, p. 27, 1945—various Amazon localities and João Pessõa, Rio Juruá (disc.); idem, l.c., **23**, p. 52, 1945—Bolivia (Riberalta, Victoria and Puerto Salinas, El Beni) (disc.).

Range.—Amazonia, from the Pará region and the Island of Maracá westward to eastern Peru and eastern Bolivia, north through eastern Ecuador to the eastern base of the east Colombian Andes (Barrigon).[1]

Field Museum Collection.—20: Brazil (Canutama, Rio Purús, 2; Labrea, Rio Purús, 1; Lago Serpa, Amazonas, 1; João Pessõa, Amazonas, 4; Igarape Grande, Amazonas, 1; Igarapa Aniba, Amazonas, 3; Lago Baptista, Amazonas, 4; Obidos, Pará, 2; Caxiricatuba, Rio Tapajoz, 1); Bolivia (Buena Vista, Santa Cruz, 1).

*Leucopternis schistacea plumbea Salvin.[2] PLUMBEOUS HAWK.

[1] A single "Bogotá" skin agrees well with Amazonian examples. Two birds, one each from Borba and Humaytá, Rio Madeira, have white transverse bands on under wing coverts and tibial feathers, and also some white at the base of the inner webs of the primaries, thus showing an approach to the western form, which cannot, therefore, be maintained as a separate species. There are no recent records of this hawk from French Guiana, although its existence in that country is not at all unlikely, in view of its having been obtained as far north as Maracá in northern Pará.

Additional material examined.—Brazil: Manáos, 1; Borba, Rio Madeira, 1; Humaytá, Rio Madeira, 2.—Peru: Cashiboya, 2.—Colombia: "Bogotá," 1..

[2] *Leucopternis schistacea plumbea* Salvin differs by much smaller size; white under wing coverts and quill-lining; broadly white-banded tibial feathers; absence of the white apical band to the rectrices, etc. Wing, (male) 220; tail, 130.

Additional material examined.—Ecuador: Paramba, 1; unspecified, 1 (the type).—Colombia: Sipi, 1.—Panama: Veraguas, 1.

Leucopternis plumbea Salvin, Ibis, (3), **2**, p. 240, pl. 8, July, 1872—Ecuador (type in Salvin-Godman Collection, now in the British Museum, examined); idem and Godman, Biol. Centr.-Amer., Aves, **3**, p. 84, 1900—Veraguas and Ecuador; Hartert, Nov. Zool., **9**, p. 605, 1902—Paramba, Ecuador; Hellmayr, Proc. Zool. Soc. Lond., 1911, p. 1204—Sipi, Pacific Colombia; Chapman, Bull. Amer. Mus. N. H., **55**, p. 234, 1926—Rio de Oro and Mindo, Ecuador; Peters, Bds. World, **1**, p. 244, 1931—eastern Panama to Ecuador; Griscom, Bull. Mus. Comp. Zool., **72**, p. 314, 1932—Permé, Panama; idem, l.c., **78**, p. 300, 1935—Veraguas and Darien.

Urubitinga plumbea Sharpe, Cat. Bds. Brit. Mus., **1**, p. 216, 1874—Panama; Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, No. 2, p. 172, 1876—Panama to Ecuador (ex Sharpe); Chapman, Bull. Amer. Mus. N. H., **36**, p. 247, 1917—Bagado and Barbacoas, western Colombia.

Urubitinga schistacea (not *Asturina schistacea* Sundevall) Taczanowski, Proc. Zool. Soc. Lond., 1877, p. 745—Santa Lucia, Rio Tumbez, Peru; idem, Orn. Pér., **1**, p. 109, 1884—part, mouth of Rio Tumbez, Peru.

Leucopternis schistacea plumbea Swann, Syn. List Accip., p. 59, 1919 (chars.; range); idem, Syn. Accip., p. 99, 1922; idem, Monog. Bds. Prey, **1**, p. 464, 1930 (monog.).

Range.—Tropical zone of Panama (west to Veraguas), western Colombia and western Ecuador to northwestern Peru (Rio Tumbez).

Field Museum Collection.—4: Colombia (La Costa, El Tambo, Cauca, 1); Ecuador (Bulun, Esmeraldas, 1; San Javier, Esmeraldas, 1; Gualea, Pichincha, 1).

*Leucopternis princeps princeps Sclater. BARRED HAWK.

Leucopternis princeps Sclater, Proc. Zool. Soc. Lond., 1865, p. 429, pl. 24—"Costa Rica, in montibus" (type, from Tucurríqui, in Salvin-Godman Collection, now in the British Museum); Lawrence, Ann. Lyc. Nat. Hist. N. Y., **9**, p. 133, 1868—Tucurríqui; Frantzius, Journ. Orn., **17**, p. 368, 1869—Costa Rica; Salvin, Ibis, 1872, p. 243—Costa Rica; Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, No. 2, p. 178, 1876—Costa Rica (monog.); idem, Proc. U. S. Nat. Mus., **6**, p. 415, 1884—Costa Rica; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 83, 1900—Tucurríqui, Costa Rica; Carriker, Ann. Carnegie Mus., **6**, p. 463, 1910—Cariblanco de Sarapíqui and La Hondura, Costa Rica; Swann, Syn. List Accip., p. 60, 1919—part, Costa Rica; idem, Syn. Accip., p. 102, 1922—part, Costa Rica; Kennard and Peters, Proc. Bost. Soc. N. H., **38**, p. 449, 1928—Boquete Trail, Panama; Swann, Monog. Bds. Prey, **1**, p. 474, 1930—part, Costa Rica; Peters, Bds. World, **1**, p. 244, 1931—Costa Rica and western Panama; Griscom, Bull. Mus. Comp. Zool., **78**, p. 300, 1935—Caribbean slope of Volcan de Chiriquí, Panama.

Urubitinga princeps Sharpe, Cat. Bds. Brit. Mus., **1**, p. 220, 1874—Costa Rica (desc. of type).

Range.—Upper Tropical zone of Costa Rica and western Panama (Boquete Trail and Cebaco Island).

Field Museum Collection.—1: Panama (Boquete, Chiriqui, 1).

***Leucopternis princeps zimmeri** Friedmann.[1] ZIMMER'S BARRED HAWK.

Leucopternis princeps zimmeri Friedmann, Auk, **52**, p. 30, Jan., 1935—San José de Sumaco, Ecuador (type in the American Museum of Natural History, New York); Lehmann, Caldasia, **2**, pls., p. 181, 1943—Santander, Colombia.

Leucopternis princeps (not of Sclater) Hartert, Nov. Zool., **9**, p. 605, 1902—Rio Cayápas, Prov. Esmeraldas, Ecuador; Swann, Syn. List Accip., p. 60, 1919—part, Ecuador; idem, Syn. Accip., p. 102, 1922—part, Ecuador; Lönnberg and Rendahl, Ark. Zool., **14**, No. 25, p. 41, 1922—near Gualea, Ecuador; Chapman, Bull. Amer. Mus. N. H., **55**, p. 235, 1926—El Chiral (west) and San José de Sumaco (east), Ecuador; Swann, Monog. Bds. Prey, **1**, p. 474, 1930—part, Ecuador; Peters, Bds. World, **1**, p. 244, 1931—part, Ecuador.

Range.—Upper Tropical zone of northern Ecuador on both sides of the Andes. Also recorded from Santander, Colombia.

Field Museum Collection.—2: Ecuador (Montes de Achotal, Esmeraldas, 1; Pacto, Pichincha, 1).

Genus **URUBITINGA** Lafresnaye

Urubitinga Lafresnaye,[2] Dict. Univ. Hist. Nat., **2**, p. 786, 1842—type, by monotypy, "L'Aigle-Autour Urubitinga" Cuvier=*Falco urubitinga* Gmelin.

Hypomorphnus Cabanis, Arch. Naturg., **10**, (1), p. 263, 1844—type, by orig. desig., *Falco urubitinga* Gmelin.

Spizageranus Kaup, Classif. Säug. Vögel, p. 120, 1844—proposed for the "*Urubitinga*"=*Falco urubitinga* Gmelin.

***Urubitinga urubitinga ridgwayi** Gurney. RIDGWAY'S BLACK HAWK.

Urubitinga ridgwayi Gurney, List Diurn. Bds. Prey, pp. 77, 148, 1884—Guatemala (Savanna Grande, Coban), Chiapas ("Sonata"=Tonalá), and Sinaloa (Presidio [de Mazatlan]) (lectotype, from Coban, Vera Paz, Guatemala, in the British Museum); Ridgway, Proc. U. S. Nat. Mus., **10**, p. 592, 1887—Segovia River, Honduras; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 79, 1900—Mexico (Mazatlan; Presidio de Mazatlan; Colima; Mirador, Orizaba, San Andrés, and Córdoba, Vera Cruz; Santa Efigenia, Barrio, and Tehuantepec, Oaxaca; Tonalá and Gineta Mountains, Chiapas; Chablé, Buctotz, and Mérida, Yucatan), British Honduras (Cayo), Guatemala (Coban, San Gerónimo, Savanna

[1] *Leucopternis princeps zimmeri* Friedmann: Similar to the nominate race, but smaller. Wing, 350–352 (against 364–367), (female) 351–358 (against 380–388 mm.). (Friedmann, Auk, **52**, p. 30, 1935.)

[2] We do not think that the quoting by Gray (List Gen. Bds., p. 2, 1840) of an alleged *Urubitinga*—used by Lesson only as a French vernacular name—in the synonymy of *Morphnus* precludes its further employment under the Rules.

Grande), Honduras (Segovia River), Nicaragua (Realejo, San Emilio, Momotombo, Sucuyá, San Cárlos, Rio Escondido), and Costa Rica (San José, Aguacate, San Mateo, Pózo Azúl, Miravalles, Gulf of Nicoya); Miller, Bull. Amer. Mus. N. H., **21**, p. 345, 1905—Escuinapa, Sinaloa; Phillips, Auk, **28**, p. 73, 1911—Altamira, Tamaulipas; Griscom, Amer. Mus. Nov., **235**, p. 12, 1926—Palmul, Yucatán; Swann, Monog. Bds. Prey, **1**, p. 455, 1930—Mexico to Costa Rica (monog.).

Morphnus urubitinga (not *Falco urubitinga* Gmelin) Sclater, Proc. Zool. Soc. Lond., **25**, p. 227, 1857—San Andrés, Tuxtla, Vera Cruz, Mexico.

Urubitinga zonura (not *Falco zonurus* Shaw) Sclater and Salvin, Ibis, 1859, p. 215—Dueñas and Vera Paz, Guatemala; Lawrence, Ann. Lyc. Nat. Hist. N. Y., **7**, p. 316, 1861—Atlantic side of Isthmus of Panama; Sclater and Salvin, Proc. Zool. Soc. Lond., 1867, p. 280—Blewfields River, Nicaragua; Lawrence, Ann. Lyc. Nat. Hist. N. Y., **9**, p. 133, 1868—San José, Costa Rica; idem, l.c., p. 207, 1869—Mérida, Yucatan; Frantzius, Journ. Orn., **17**, p. 368, 1869—Aguacate, Costa Rica; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 213, 1874—part, spec. k, Costa Rica; Lawrence, Mem. Bost. Soc. N. H., **2**, p. 302, 1874—Mazatlan, Sinaloa; idem, Bull. U. S. Nat. Mus., **4**, p. 42, 1876—Oaxaca (Santa Efigenia, Barrio, Tehuantepec City) and Chiapas (Gineta Mountains), Mexico; Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, No. 2, p. 168, 1876—part, Mexico (Mirador, Yucatan [Mérida], Rio Tupila, Tehuantepec, Colima, Mazatlan), Guatemala, and Costa Rica (San José, Sipurio); Sumichrast, La Naturaleza, **5**, p. 236, 1881—Orizaba and Córdoba, Vera Cruz; Nutting, Proc. U. S. Nat. Mus., **5**, p. 404, 1882—La Palma de Nicoya, Costa Rica; idem, l.c., **6**, p. 388, 1884—Sucuyá, Nicaragua.

Urubitinga urubitinga ridgwayi Zeledón, Anal. Mus. Nac. Costa Rica, **1**, p. 126, 1887—San José and San Mateo, Costa Rica; Cherrie, Auk, **9**, p. 328, 1892—San José; idem, Anal. Inst. Fis.-Geog. Mus. Nac. Costa Rica, **4**, p. 145, 1893—Punta Mala (delta del Diquís) and Laguna del Sierpe, Costa Rica; Richmond, Proc. U. S. Nat. Mus., **16**, p. 521, 1893—Rio Escondido, Nicaragua, and San Cárlos, Costa Rica; Carriker, Ann. Carnegie Mus., **6**, p. 461, 1910—Costa Rica (La Vijagua, El Hogar, Bebedéro); Swann, Syn. List Accip., p. 58, 1919—Guatemala and Mexico (chars.); idem, Syn. Accip., p. 97, 1922—Mexico to Costa Rica (chars.); Bangs and Peters, Bull. Mus. Comp. Zool., **68**, p. 388, 1928—Chivelá, Oaxaca; Peters, l.c., **71**, p. 310, 1931—Almirante, Panama; Griscom, Bull. Amer. Mus. N. H., **64**, p. 157, 1932—Hacienda California and Chimoxan, Guatemala.

Hypomorphnus urubitinga ridgwayi Peters, Bds. World, **1**, p. 244, 1931 (range); van Rossem, Bull. Mus. Comp. Zool., **77**, p. 429, 1934—Alamos, Sonora; Griscom, l.c., **78**, p. 300, 1935—Cerro Flores (Chiriquí) and Canal Zone, Panama; Van Tyne, Misc. Pub., Mus. Zool. Univ. Mich., **27**, p. 16, 1935—Uaxactun, Petén, Guatemala; Traylor, Field Mus. Nat. Hist., Zool. Ser., **24**, p. 203, 1941—Pacaitun, Campeche, Mexico.

Range.—Mexico, from states of Sonora (Alamos) and Tamaulipas (Alta Mira) south through Central America to Panama (Almirante; Cerro Flores, Chiriquí; Lion Hill).[1]

[1] Fifteen specimens (adult and young) from Mexico to Costa Rica examined.

Field Museum Collection.—6: Mexico (Pacaitun, Campeche, 2); Guatemala (Petén, 1; Volcan Tajumulco, San Marcos, 1; Tiquisate, Guatemala, 1); Costa Rica (Villa Quesada, Alajuela, 1).

***Urubitinga urubitinga urubitinga** (Gmelin). BRAZILIAN BLACK HAWK.

Falco urubitinga Gmelin, Syst. Nat., **1**, (1), p. 265, 1788—based on Brisson, Orn., **1**, p. 445, ex "Urubitinga" Marcgrave, Hist. Nat. Bras., p. 214, northeastern Brazil; Temminck, Nouv. Rec. Pl. Col., livr. 10, pl. 55 (young), 1821—Brazil; Wied, Beitr. Naturg. Bras., **3**, (1), p. 196, 1830—Muribecca (Rio Itabapuana) and Rio Mucurí, Espirito Santo, also southern Bahia.

Falco zonurus Shaw, Gen. Zool., **7**, (1), p. 62, 1809—based on "L'Aigle noir huppé d'Amérique" Sonnini, in Buffon, Hist. Nat. Gén. et Part., **38**, p. 29, pl. 6, South America (type in Paris Museum).

Pandion fulvus Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **3**, p. 163, 1816—based on "L'Aigle de Montevideo" Sonnini, in Buffon, Hist. Nat. Gén. et Part., **38**, p. 81, pl. 8 (descr. of young).

Spizaëtus niger Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **32**, p. 57, 1819—Cayenne (descr. of adult; location of type not stated).

Spizaëtus ater Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **32**, p. 58, 1819—based on "L'Aigle noir huppé d'Amérique" Sonnini, in Buffon, Hist. Nat. Gén. et Part., **38**, p. 29, pl. 6, South America.

Aquila urubitinga Spix, Av. Spec. Nov. Bras., **1**, p. 4, pl. 1b, 1824—Bahia and Pará, Brazil (=adult).

Aquila picta Spix, Av. Spec. Nov. Bras., **1**, p. 5, pl. 1c, 1824—Marajó Island, Brazil (descr. of young; type in Munich Museum examined; cf. Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **22**, No. 3, p. 568, 1906).

Morphnus urubitinga d'Orbigny, Voy. Amér. Mérid., Ois., p. 86, 1835—Corrientes, Banda Oriental, and Chiquitos, Bolivia; Lafresnaye and d'Orbigny, Syn. Av., **1**, in Mag. Zool., **7**, cl. 2, p. 4, 1837—Corrientes, Buenos Aires, and Bolivia (Chiquitos); Gray and Mitchell, Gen. Bds., **1**, pl. vii, fig. 6, 1845; Jardine, Ann. Mag. Nat. Hist., **18**, p. 116, 1846—Tobago; Sclater, Proc. Zool. Soc. Lond., **25**, p. 261, 1857—Rio Javarri; Léotaud, Ois. Trinidad, p. 14, 1866—Trinidad; Hellmayr, Nov. Zool., **28**, p. 177, 1921 (range); Todd and Carriker, Ann. Carnegie Mus., **14**, p. 152, 1922—Fundación, Bonda, Neguange, and San Diego, Santa Marta, Colombia; Girard, El Hornero, **5**, p. 224, 1933—Tucumán (nest and eggs).

Hypomorphnus urubitinga Tschudi, Arch. Naturg., **10**, (1), p. 263, 1844—Peru; idem, Unters. Faun. Peru., Orn., p. 84, 1846—forest region of Peru; Cabanis, in Schomburgk, Reisen Brit. Guiana, **3**, "1848," p. 740, 1849—Waini River; Burmeister, Syst. Uebers. Th. Bras., **2**, p. 43, 1855—Brazil; idem, Proc. Zool. Soc. Lond., 1868, p. 633—island in the mouth of the Rio Paraná, near La Conchas, Buenos Aires; Berlepsch, Journ. Orn., **35**, p. 28, 1887—Lambaré, Paraguay; Dugand, Rev. Acad. Colomb. Cienc., Bogotá, **4**, p. 399, pl. 6, fig. 33, 1941—Colombia.

Urubitinga longipes (Illiger MS.) Bonaparte, Consp. Gen. Av., **1**, p. 29, 1850 (new name for *Falco urubitinga* Gmelin).

Morphnus braziliensis Strickland, Orn. Syn., **1**, p. 24, 1855 (new name for *Falco urubitinga* Gmelin).

Urubitinga zonura Sclater, Proc. Zool. Soc. Lond., **28**, p. 288, 1860—Babahoyo, Ecuador; idem and Salvin, l.c., 1867, pp. 559, 753—Island of Mexiana, Brazil, and Chyavetas, Peru; iidem, l.c., 1873, p. 302—Rio Javarri, Chyavetas, Chamicuros, and Santa Cruz, Peru; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 213, 1874—part, Pará, Island of Mexiana, Cayenne, and Demerara; Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, No. 2, p. 168, 1876—part, Vermejo River, Paraguay; Taczanowski, Orn. Pér., **3**, p. 104, 1884—Peruvian localities; Berlepsch, Ibis, 1884, p. 436—Angostura, Rio Orinoco, Venezuela; Salvin, Ibis, 1886, p. 74—British Guiana (ex Schomburgk); Kerr, Ibis, 1892, p. 142—near Fortín Donovan, lower Pilcomayo; Salvadori, Boll. Mus. Zool. Torino, **12**, No. 292, p. 29, 1897—San Lorenzo, Jujuy, and Caiza, Bolivia; Ihering, Ann. Est. Rio Grande do Sul, **16**, p. 140, 1899—Rio Grande do Sul; idem, Rev. Mus. Paul., **3**, p. 355, 1899—Iguapé, São Paulo; Salvadori, Boll. Mus. Zool. Torino, **15**, No. 378, p. 13, 1900—Urucúm, Matto Grosso; idem, l.c., **15**, No. 378, p. 13, 1900—Urucúm, Matto Grosso; idem and Festa, l.c., **15**, No. 363, p. 30, 1900—Rio Peripa, Ecuador; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 79, 1900—Bebedéro, Nicoya, Costa Rica; Goeldi, Ibis, 1903, p. 496—Capim River, Pará; Hagmann, Zool. Jahrb. (Syst.), **26**, p. 22, 1907—Mexiana Island; Grant, Ibis, 1911, p. 331—Tayrú and Villa Pilar, Paraguay.

Urubitinga brasiliensis Pelzeln, Verh. Zool. Bot. Ges. Wien, **12**, pp. 137, 178, 1862—Cayenne and Brazil (Cuyabá, Villa Maria, Itararé, Forte do Rio Branco) (soft parts); idem, Orn. Bras., **1**, p. 2, 1868—São Paulo (Itararé), Matto Grosso (Engenho do Pari, Cuyabá, Villa Maria, Rio de Cabaçal, Caiçara, Villa Bella, Rio Guaporé), Rio Madeira (Cachoeira do Rio Madeira, Borba), Barra do Rio Negro, and Rio Branco (Forte do São Joaquim, Serra Arimani, below the Cachoeira), Brazil; Reinhardt, Vidensk. Medd. Naturhist. Foren., 1870, p. 71—Sumidouro, Minas Geraes.

Asturina urubitinga Schlegel, Mus. Pays-Bas, Asturinae, p. 6, 1862—Brazil and New Grenada.

Urubitinga urubitinga Riker and Chapman, Auk, **8**, p. 161, 1891—Santarém, Brazil; Berlepsch and Hartert, Nov. Zool., **9**, p. 113, 1902—Quiribana de Caicara and Caicara, Orinoco; La Prición and Nicare, Caura, Venezuela; Hartert, l.c., p. 605, 1902—Bulún, Ecuador; Lillo, Anal. Mus. Nac. Buenos Aires, **8**, p. 204, 1902—Rio Salí and Rio Calera, Tucumán; idem, Rev. Letr. Cienc. Soc., **3**, No. 13, p. 62, 1905—same localities; Ihering, Cat. Faun. Braz., **1**, p. 92, 1907—Iguapé and Itapura, São Paulo; Snethlage, Journ. Orn., **56**, p. 22, 1908—Cachoeira, Rio Purús; Berlepsch, Nov. Zool., **15**, p. 292, 1908—Cayenne; Hartert and Venturi, l.c., **16**, p. 240, 1909—Mocoví, Santa Fé, and Malvina and Barránca Colorado, Tucumán; Beebe, Zoologica (N.Y.), **1**, p. 80, 1909—Guanoco, Orinoco Delta; Carriker, Ann. Carnegie Mus., **6**, p. 461, 1910—Bebedéro, Costa Rica; Chubb, Ibis, 1910, p. 73—Sapucay, Paraguay; Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 246, 1910 (range in Argentina); Hellmayr,

Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **26**, No. 2, pp. 96, 121, 1912—Rio Capim and Mexiana, Pará; Stone, Proc. Acad. Nat. Sci. Phila., **65**, p. 194, 1913—Caño Corosal, Orinoco Delta, Venezuela; Snethlage, Bol. Mus. Goeldi, **8**, p. 133, 1914—Rio Capim, Maracá, Mexiana and Rio Purús (Cachoeira); Chubb, Bds. Brit. Guiana, **1**, p. 246, 1916—Supenaam River, Abary River, Anarika River, Cako River, Great Falls, Demerara River, and Waini River; Cherrie, Sci. Bull., Mus. Brookl. Inst., **2**, p. 343, 1916—Orinoco Valley; Chapman, Bull. Amer. Mus. N. H., **36**, p. 247, 1917—Salaquí, Atrato River, and Monguido, Colombia; Bangs and Penard, Bull. Mus. Comp. Zool., **62**, p. 37, 1918—vicinity of Paramaribo, Surinam; Marelli, El Hornero, **1**, p. 77, 1918—San Miguel, Corrientes; Arribálzaga, l.c., **2**, p. 92, 1920—Chaco; Serié and Smyth, l.c., **3**, p. 44, 1923—Santa Elena, Entre Ríos; Marelli, Mem. Min. Obr. Publ. for 1922–23, p. 630, 1924—Platános, Buenos Aires; Ménégaux, Rev. Franç. d'Orn., 1925, p. 282—Rio Salado, Laguna Maimata, and Laguña Cañitas, near Icaño, Santiago del Estero; Chapman, Bull. Amer. Mus. N. H., **55**, p. 233, 1926—Daule, Alamor, and Rio Pullango, Ecuador; Dabbene, El Hornero, **3**, p. 422, 1926—Rocha, Uruguay.

Urubitinga urubitinga urubitinga Hellmayr, Nov. Zool., **17**, p. 411, 1910—Cachoeira do Madeira and Borba, Rio Madeira; Swann, Syn. List Accip., p. 58, 1919 (range); idem, Syn. Accip., p. 96, 1922 (range); Wetmore, Bull. U. S. Nat. Mus., **133**, p. 109, 1926—Chaco (Las Palmas), Formosa (Riacho Pilaga), and Paraguay (Puerto Pinasco); Swann, Monog. Bds. Prey, **1**, p. 451, pl. [27], 1930 (monog.); Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 442, 1936—Rio Santa Cruz, Rio Colorado, and Urundel, Salta (crit.; range in Argentina).

Urubutinga urubutinga Reiser, Denks. Math.-Naturw. Kl. Akad. Wiss. Wien, **76**, p. 90, 1910—Pé do Morro and Lagõa do Limoeiro, Piauhy; Bertoni, Faun. Parag., p. 43, 1914—Paraguay.

Urubitinga urubitinga occidentalis Swann, Syn. Accip., p. 97, 1922—Rio Bogotá, [Prov. Esmeraldas], Ecuador (type in Museum of Comparative Zoology, Cambridge, Mass.); idem, Monog. Bds. Prey, **1**, p. 454, 1930—western Ecuador.

Morphnus urubitinga urubitinga Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **12**, p. 462, 1929—Piauhy; Naumburg, Bull. Amer. Mus. N. H., **60**, p. 109, 1930—Matto Grosso; Laubmann, Wiss. Erg. Deuts. Gran Chaco Exp., Vögel, p. 109, 1930—Formosa (Tacaaglé) and Bolivia (Villa Montes, Tarija; San José, Santa Cruz).

Urubitinga urubitinga azarae Swann, Monog. Bds. Prey, **1**, p. 453, 1930—Gomez, Tucumán (type in coll. of H. K. Swann, now in collection of J. H. Fleming, Toronto, Canada).

Hypomorphnus urubitinga urubitinga Peters, Bds. World, **1**, p. 244, 1931 (range); Griscom, Bull. Mus. Comp. Zool., **72**, p. 314, 1932—Permé, Darien; Belcher and Smooker, Ibis, 1934, p. 592—Trinidad (Caroni Swamp; breeding) and Tobago; Stone and Roberts, Proc. Acad. Nat. Sci. Phila., **86**, p. 372, 1934—Descalvados, Matto Grosso; Griscom, Bull. Mus. Comp. Zool., **78**, p. 300, 1935—Permé, Darien, Panama.

Hypomorphnus urubitinga azarae Peters, Bds. World, 1, p. 24, 1931—Paraguay and Argentina; Gyldenstolpe, K. Svensk. Vetensk. Akad. Handl., (3), 23, p. 53, 1945—Bresta, El Beni, Bolivia (crit.).

Range.—Tropical South America from eastern Panama (Permé, Darien), Colombia, and Venezuela, including the islands of Trinidad and Tobago, south to western Ecuador and east of the Andes to Uruguay, Buenos Aires (Platános; mouth of the Rio Paraná, near Las Conchas), Santa Fé (Mocoví) and Tucumán, Argentina; accidental in Costa Rica (one record from Bebedéro, Guanacaste).[1]

Field Museum Collection.—70: Panama (Puerto Obaldia, Darien, 1); Colombia (Rio Jurado, Choco, 1; Rio Salaqui, Choco, 2; La Paila, Valle del Cauca, 1; Arroyo de Piedra, Atlantico, 1); Venezuela (Perija, Rio Cogollo, Zulia, 1); Ecuador (Montes del Achotal, Esmeraldas, 1; Lambarandon, Occidente, 1); British Guiana (Buxton, 6; Demerara River, 1; Rockstone, 1; Itabu Creek, Middle Base Camp, 1); Brazil (Labrea, Rio Purús, 6; Canutama, Rio Purús, 1; Lago do Baptista, Amazonas, 4; Igarape Aniba, Amazonas, 4; Itacoatiara, Amazonas, 4; Boca Ituqui, Pará, 2; Monte Alegre, Pará, 2; Caxiricatuba, Pará, 1; Obidos, Pará, 3; Nova Roma, Rio Paraná, Goyaz, 2; Descalvados, Matto Grosso, 1); Bolivia (Buena Vista, Santa Cruz, 7; Rio Surutú, Santa Cruz, 1); Paraguay (Cerro de Amambay, 1; Horqueta, 1; Riacho Caballero, 45 km. west of Puerto Rosario, 4); Argentina (Concepción, Tucumán, 8).

[1] It seems hardly possible to maintain the two races which were separated by Swann, mainly on size. Birds from western Colombia and western Ecuador (*occidentalis*), while not constantly smaller, as claimed by the describer, have less white at the base of the tail than the majority from Brazil, though one or two eastern specimens (Matto Grosso and British Guiana) show the white even less extended. In describing *U. u. azarae*, Swann was no doubt misled by a wrongly sexed specimen; still I cannot account for his measurements of the female sex. After comparing a goodly number of properly sexed individuals from Guiana, Amazonia, Brazil, and Argentina, I fail to notice any appreciable differences in size. Adult males from British Guiana vary from 400 to 415 in length of wing; those from Argentina (Salta, Formosa), from 400 to 410; others from Brazilian Amazonia, from 370 to 400 mm.

Twenty-three adult specimens examined.—C.E.H.

The series in Field Museum (most of which were received after Dr. Hellmayr's departure for Europe) contain forty-two sexed specimens of adults taken from Panama to Argentina. These give wing measurements as follows: Panama, western Colombia and western Ecuador, males 360–390, females 373–377; British Guiana, males 390–395, females 405–420; Brazil, males 375–410, females 378–418; Bolivia, males 395–415, females 415–420; Paraguay, males 420–440, females 428–445; Argentina, males 426–430, females 413–442. Birds from Paraguay and northwestern Argentina therefore show a strong tendency toward larger size, as Swann has pointed out. The overlap is such, however, that an appreciable number of specimens could be identified only by locality if the race *azarae* is recognized. Comparison of five adults from British Guiana with five from Tucuman, Argentina, does not show the color differences claimed by Swann.—B.C.

Genus BUTEOGALLUS Lesson

Buteogallus Lesson, Traité d'Orn., livr. 2, p. 83, May, 1830—type, by monotypy, *Buteogallus cathartoides* Lesson=*Falco aequinoctialis* Gmelin.

*Buteogallus aequinoctialis (Gmelin). EQUINOCTIAL HAWK.

Falco aequinoctialis Gmelin, Syst. Nat., **1**, (1), p. 265, 1788—based on "Aequinoctial Eagle" Latham, Gen. Syn. Bds., **1**, (1), p. 43, Cayenne (type in coll. of Miss Blomefield).

Falco buson Daudin, Traité Elém. d'Orn., **2**, p. 168, 1800—based on "Le Buson" Levaillant, Hist. Nat. Ois. Afr., **1**, p. 86, pl. 21, Cayenne.

Buteogallus cathartoides Lesson, Traité d'Orn., livr. 2, p. 83, May, 1830—based on "Le Buson" Levaillant and *Falco buson* Daudin.

Hypomorphnus buson Cabanis, in Schomburgk, Reisen Brit. Guiana, **3**, "1848," p. 740, 1849—British Guiana.

Urubitinga aequinoctialis Pelzeln, Verh. Zool.-Bot. Ges. Wien, **12**, pp. 139, 181, 1862—Paranaguá, Paraná, and Cajútuba, Pará, Brazil, and Cayenne (soft parts); idem, Orn. Bras., **1**, p. 3, 1868—Paranaguá and Cajútuba.

Buteo aequinoctialis Schlegel, Mus. Pays-Bas, Buteones, p. 18, 1862—Surinam and Cayenne (descr.).

Buteogallus aequinoctialis Sharpe, Cat. Bds. Brit. Mus., **1**, p. 212, 1874—Demerara, British Guiana; Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, No. 2, p. 141, 1876—"Colombia" (ex Sharpe), Demerara, and Cayenne (monog.); Salvin, Ibis, 1886, p. 74—British Guiana; Ihering, Rev. Mus. Paul., **3**, p. 355, 1899—Iguapé, São Paulo; idem, Cat. Faun. Braz., **1**, p. 92, 1907—Paraná to Pará and Guiana, "Colombia," and "Paraguay" (errore); Berlepsch, Nov. Zool., **15**, p. 292, 1908—Cayenne; Reiser, Denks. Math.-Naturw. Kl. Akad. Wiss. Wien, **76**, p. 90, 1910—coast of Piauhy; Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **26**, No. 2, p. 96, 1912—Cajútuba, Pará; Stone, Proc. Acad. Nat. Sci. Phila., **65**, p. 195, 1913—Pedernales, Orinoco Delta, Venezuela; Snethlage, Bol. Mus. Goeldi, **8**, p. 133, 1914—Marajó, Brazil; Cherrie, Sci. Bull., Mus. Brookl. Inst., **2**, p. 344, 1916—Pedernales, Venezuela; Chubb, Bds. Brit. Guiana, **1**, p. 244, 1916—Ituribisi, Abary River, and Georgetown; Bangs and Penard, Bull. Mus. Comp. Zool., **62**, p. 36, 1918—Fort Niew Amsterdam and Tijgerbank, Surinam; Swann, Syn. List Accip., p. 57, 1919 (chars.; range); idem, Syn. Accip., p. 96, 1922 (chars.; range); Reiser, Denks. Math.-Naturw. Kl. Akad. Wiss. Wien, **76**, p. 205, 1923—Miritiba, Maranhão, and Igarassú Channel (near Parnahyba), Ilha Grande, and Amaração, coast of Piauhy; Young, Ibis, 1927, p. 84—Matappica Creek, Dutch Guiana; idem, l.c., 1929, p. 10—Blairmont, coast of British Guiana; Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **12**, p. 461, 1929—Miritiba and Bõa Vista, Maranhão; Swann, Monog. Bds. Prey, **1**, p. 449, pl. 26, fig. 2, 1930 (monog.); Peters, Bds. World, **1**, p. 245, 1931 (range).

Ibiceter (sic) spec. Reiser, Denks. Math.-Naturw. Kl. Akad. Wiss. Wien, **76**, p. 100, 1910—Miritiba, Maranhão (spec. examined).

Range.—Swampy forests of the Atlantic coast of South America from the Orinoco Delta (Pedernales) to the Brazilian State of Paraná (Paranaguá).[1]

Field Museum Collection.—4: British Guiana (Georgetown, 2; Charity, Essequibo, 1; Buxton, 1).

***Buteogallus anthracinus** (Lichtenstein). MEXICAN BLACK HAWK.

Falco anthracinus Lichtenstein, Preis-Verz. Säug., Vögel, etc. Mexico, p. 2, 1830—Mexico (type in Berlin Museum); Cabanis, Journ. Orn., **11**, p. 58, 1863 (reprint); Nitzsch, Syst. Pterylographie, p. 83, 1840—Mexico (descr.).

Morphnus mexicanus Du Bus, Bull. Acad. Roy. Belg., **14**, (2), No. 8, p. 102, July, 1847—"la province de Tabasco, au Mexique et le Guatimala" (type in Brussels Museum); Lafresnaye, Rev. Zool., **11**, p. 239, 1848 (crit.).

Hypomorphnus anthracinus Cabanis, in Schomburgk, Reisen Brit. Guiana, **3**, "1848," p. 740, 1849—mouth of the Waini River.

Morphnus anthracinus Sclater, Proc. Zool. Soc. Lond., **25**, pp. 211, 227, 1857—Orizaba and near San Andrès Tuxtla, Vera Cruz, Mexico.

Urubitinga anthracina Sclater, Proc. Zool. Soc. Lond., **26**, p. 295, 1858—La Parada, Oaxaca, Mexico; Moore, l.c., **27**, p. 52, 1859—Omoa, Honduras; Sclater and Salvin, Ibis, 1859, p. 216—Guatemala and Costa Rica (Punta Arenas, Gulf of Nicoya); iidem, l.c., 1860, p. 45—Dueñas, Guatemala; Owen, l.c., 1861, p. 68—San Gerónimo, Guatemala (egg descr.); Lawrence, Ann. Lyc. Nat. Hist. N. Y., **7**, p. 316, 1861—Pacific side of Isthmus of Panama; Sclater and Salvin, Proc. Zool. Soc. Lond., 1864, p. 369—Panama Railroad; Lawrence, Ann. Lyc. Nat. Hist. N. Y., **8**, p. 185, 1865—Greytown, Nicaragua; Sclater and Salvin, Proc. Zool. Soc. Lond., 1867, p. 280—Blewfield's River, Nicaragua; iidem, l.c., 1868, p. 629—[northern] Venezuela; Lawrence, Ann. Lyc. Nat. Hist. N. Y., **9**, p. 133, 1868—San José and Angostura, Costa Rica; idem, l.c., p. 238, 1869—Puná Island, Ecuador; Frantzius, Journ. Orn., **17**, p. 368, 1869—Costa Rica; Salvin, Proc. Zool. Soc. Lond., 1870, p. 215—Chitrá, Veraguas, and Bugaba, Chiriquí; Sclater and Salvin, l.c., 1870, p. 838—Honduras; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 215, 1874 (monog.; excl. of Cuba); Lawrence, Mem. Bost. Soc. N. H., **2**, p. 302, 1874—Mazatlan, Sinaloa, and San Blas, Nayarit; idem, Bull. U. S. Nat. Mus., **2**, p. 42, 1874—Tehuantepec (Tapana, Santa Efigenia), Mexico; Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, No. 2, p. 170, 1876 (monog.); Lawrence, Proc. U. S. Nat. Mus., **1**, p. 194, 1878—Cumberland Valley, St. Vincent; Salvin and God-

[1] The localities "Colombia" and "Paraguay" are clearly erroneous. Wyatt (Ibis, 1871, p. 189) lists *Buteogallus aequinoctialis* as having been shot "on a savanna near Aguachica," Magdalena, Colombia. This record cannot well belong to the present species, which does not frequent savannas. Bertoni (Faun. Parag., p. 42, 1914) mentions it for Paraguay without comment.

Additional material examined.—Cayenne, 1.—British Guiana: Demerara, 1.—Brazil: Cajútuba, Pará, 1; Miritiba, Maranhão, 1; Bõa Vista, Maranhão, 1; Amaração, Piauhy, 1; Paranaguá, Paraná, 3.

man, Ibis, 1880, p. 177—Santa Marta; Sumichrast, La Naturaleza, **1**, p. 236, 1881—Tehuantepec and Chiapas (Tonalá), Mexico; Nutting, Proc. U. S. Nat. Mus., **5**, p. 404, 1882—La Palma de Nicoya, Costa Rica; idem, l.c., **6**, pp. 377, 408, 1883—San Juan del Sur and Los Sábalos, Nicaragua; Boucard, Proc. Zool. Soc. Lond., 1883, p. 456—Chablé and Mérida, Yucatan; Salvin, Ibis, 1885, p. 193—Cozumel Island; Ridgway, Proc. U. S. Nat. Mus., **8**, p. 581, 1885—Cozumel Island; Ferrari-Perez, l.c., **9**, p. 167, 1886—Atzala (Chietla), Puebla, and Jalapa, Vera Cruz; Salvin, Ibis, 1886, p. 74—British Guiana (ex Schomburgk); Cory, l.c., p. 473—St. Vincent; Mearns, Auk, **3**, p. 69, 1886—Arizona (Fossil Creek, Rio Verde, etc.) (descr.; habits); Zeledón, Anal. Mus. Nac. Costa Rica, **1**, p. 126, 1887—Jiménez, Pózo Azúl de Pirrís, and Talamanca, Costa Rica; Cory, Auk, **4**, p. 42, 1887—part, St. Vincent and (?)Grenada; Salvin, Ibis, 1889, p. 375—Cozumel; Cory, Cat. W. Ind. Bds., p. 99, 1892—part, St. Vincent and (?)Grenada; Cherrie, Auk, **9**, p. 328, 1892—north of San José, Costa Rica; idem, Anal. Inst. Fís.-Geog. Mus. Nac. Costa Rica, **4**, p. 145, 1893—Palmar, Costa Rica; Allen, Bull. Amer. Mus. N. H., **5**, p. 34, 1893—San Diego, Chihuahua; Richmond, Proc. U. S. Nat. Mus., **16**, p. 521, 1893—Rio Escondido and San Cárlos, Nicaragua; idem, l.c., **18**, p. 628, 1896—Alta Mira, Tamaulipas, Mexico; Salvadori and Festa, Boll. Mus. Zool. Torino, **14**, No. 339, p. 11, 1899—Punta de Sabana, Laguna de la Pita, Darien; Allen, Bull. Amer. Mus. N. H., **13**, p. 130, 1900—Bonda, Colombia; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 81, 1901—Arizona to Panama; Thayer and Bangs, Bull. Mus. Comp. Zool., **46**, p. 144, 1905—San Miguel Island; Miller, Bull. Amer. Mus. N. H., **21**, p. 345, 1905—Escuinapa and Arroyo de Limones, Sinaloa, Mexico; idem, l.c., **22**, p. 163, 1906—Rio Sestín, Durango, Mexico; Bailey, Auk, **23**, p. 386, 1906—San Blas, Tepic, Mexico; Dearborn, Field Mus. Nat. Hist., Orn. Ser., **1**, p. 82, 1907—San José, Guatemala; Carriker, Ann. Carnegie Mus., **6**, p. 462, 1910—Costa Rica (Guayábo, Pígres, San José, Cerro de Santa Maria, Bolson, Guácimo, El Hogar); Phillips, Auk, **28**, p. 73, 1911—Galindo and Rio Cruz, Tamaulipas; Stone, Proc. Acad. Nat. Sci. Phila., **65**, p. 195, 1913—La Pedrita (Rio Uracoa), Cariaquito, Venezuela; Chubb, Bds. Brit. Guiana, **1**, p. 248, 1916—mouth of the Waini River (ex Schomburgk); Stone, Proc. Acad. Nat. Sci. Phila., **70**, p. 250, 1918—Fort Lorenzo, Panama; Rendahl, Ark. Zool., **12**, No. 8, p. 9, 1919—Nicaragua (San Juan del Norte; Rio Ometépe; Zapatera); idem, l.c., **13**, No. 4, p. 20, 1920—Bayoneta and San Miguel Islands, Pearl Islands; Hallinan, Auk, **41**, p. 311, 1924—Rio Juan Diaz and Ancon, Panama; Griscom, Amer. Mus. Nov., **235**, p. 12, 1926—Culebra Key, Yucatan.

Urubitinga mexicana Cassin, Proc. Acad. Nat. Sci. Phila., **1860**, p. 133—delta of the Atrato River, Colombia.

Astur unicinctus (not *Falco unicinctus* Temminck) Léotaud, Ois. Trinidad, p. 44, 1866—Trinidad.

Hypomorphnus gundlachi (not of Cabanis) Finsch, Proc. Zool. Soc. Lond., 1870, p. 554—Trinidad.

Urubitinga schistacea (not *Asturina schistacea* Sundevall) Taczanowski, Proc. Zool. Soc. Lond., 1877, p. 745—Santa Lucia, Tumbez, Peru (spec. examined); idem, Orn. Pér., **1**, p. 84, 1884—part, Tumbez.

Urobitinga anthracina Bangs, Proc. New Eng. Zool. Cl., **3**, p. 20, 1902—Sona, Chiriquí.

(?) *Urubitinga subtilis* Thayer and Bangs, Bull. Mus. Comp. Zool., **46**, p. 94, June, 1905—Gorgona Island, off Colombia (type in Bangs Collection, now in Museum of Comparative Zoology, Cambridge, Mass.; cf. Bangs, Bull. Mus. Comp. Zool., **70**, p. 191, 1930).

Urubitinga anthracina cancrivora Clark, Proc. Biol. Soc. Wash., **18**, p. 63, Feb. 21, 1905—Barrouallie, St. Vincent (type in Bangs Collection, now in Museum of Comparative Zoology, Cambridge, Mass.; cf. Bangs, Bull. Mus. Comp. Zool., **70**, p. 191, 1930); idem, Proc. Bost. Soc. N. H., **32**, p. 244, 1905—St. Vincent; Swann, Syn. Accip., p. 97, 1922—St. Vincent, Santa Lucia, and Trinidad (chars.); idem, Monog. Bds. Prey, **1**, p. 458, 1930 (monog.).

Urubitinga anthracina Ingram, Zoologist, 1913, p. 253—Trinidad.

(?) *Urubitinga urubitinga subtilis* Swann, Syn. List Accip., p. 58, 1919—southwestern Colombia.

Urubitinga anthracina anthracina Swann, Syn. List Accip., p. 58, 1919 (chars.; range); idem, Syn. Accip., p. 97, 1922 (chars.; range); McLellan, Proc. Calif. Acad. Sci., (4), **16**, p. 20, 1927—San Blas, Nayarit, Mexico; Kennard and Peters, Proc. Bost. Soc. N. H., **38**, p. 449, 1928—Almirante, Panama; Peters, Bull. Mus. Comp. Zool., **69**, p. 417, 1929—east of Tela, Honduras; Swann, Monog. Bds. Prey, **1**, p. 456, pl. 33, fig. 9 (egg), 1930 (monog.); Peters, Bull. Mus. Comp. Zool., **71**, p. 310, 1931—Almirante, Western River, Banana River, and Changuinola, Panama; Darlington, l.c., p. 366, 1931—vicinity of Rio Frio, Magdalena, Colombia; Griscom, Bull. Amer. Mus. N. H., **64**, p. 157, 1932—Guatemala (Finca Sepacuite, La Montañita, San Antonio, Finca El Cipres, Ocos); Stone, Proc. Acad. Nat. Sci. Phila., **84**, p. 300, 1932—Cantarranas, Honduras; Bent, Bull. U. S. Nat. Mus., **167**, p. 258, 1937 (monog.).

Morphnus anthracinus anthracinus Todd and Carriker, Ann. Carnegie Mus., **14**, p. 152, 1922—Bonda, Playa Concha, and Cinto, Colombia (crit.).

(?) *Urubitinga anthracina subtilis* Swann, Syn. Accip., p. 98, 1922—Gorgona Island; Chapman, Bull. Amer. Mus. N. H., **55**, p. 233, 1926—Puná Island, Ecuador (crit.); Swann, Monog. Bds. Prey, **1**, p. 459, 1930—Gorgona Island.

Urubitinga anthracina bangsi Swann, Syn. Accip., p. 98, 1922—San Miguel Island, Pearl Islands, Panama (type in Museum of Comparative Zoology, Cambridge, Mass.); idem, Monog. Bds. Prey, **1**, p. 460, 1930 (monog.); Bangs, Bull. Mus. Comp. Zool., **70**, p. 191, 1930 (crit.).

Buteogallus anthracinus anthracinus Peters, Bds. World, **1**, p. 244, 1931—southern Arizona and Texas to Panama; Griscom, Bull. Mus. Comp. Zool., **72**, p. 315, 1932—Permé, Panama; van Rossem, l.c., **77**, p. 430, 1934—Alamos, Sonora, Mexico; Griscom, l.c., **78**, p. 300, 1935—Panama; Bond, Proc. Acad. Nat. Sci. Phila., **88**, p. 356, 1936—Utilla Island, Bay of Honduras.

Buteogallus anthracinus cancrivorus Peters, Bds. World, **1**, p. 245, 1931—St. Vincent, Trinidad, and (?)north coast of Venezuela and Colombia; Belcher and Smooker, Ibis, 1934, p. 592—Caroni Swamp and Caroni

River, Trinidad (nest and egg descr.); Danforth, Monog. Univ. Puerto Rico, Ser. B, No. 3, p. 24, 1935—Santa Lucia(?).

(?)*Buteogallus subtilis* Peters, Bds. World, **1**, p. 245, 1931—Pacific slope of San Salvador to Ecuador (Puná Island); Griscom, Auk, **50**, p. 303, 1933—Rio Chepo, Darien; idem, Bull. Mus. Comp. Zool., **78**, p. 300, 1935—Darien and Pearl Islands.

Buteogallus anthracinus subtilis Aldrich, Sci. Pub. Cleveland Mus. N. H., **7**, p. 44, 1937—Paracoté, Azuero Peninsula, Panama (crit.).

Buteogallus anthracinus micronyx van Rossem and Hachisuka,[1] Trans. San Diego Soc. N. H., **8**, p. 361, June 15, 1937—Arivaipa Creek, Arizona (type in collection of W. J. Sheffler); van Rossem, Occ. Pap. Mus. Zool. Louisiana State Univ., **21**, p. 59, 1945—Sonora (distr.).

Range.—Southern Arizona and Texas (lower Rio Grande Valley) south to Panama and northwestern Peru (Tumbez) and east along the north coast of Colombia and Venezuela, and the Island of Trinidad, to northwestern British Guiana (mouth of the Waini River, Georgetown); St. Vincent, Lesser Antilles.[2]

[1] This race is said to range from southern Arizona to southern Sonora and in the adults to differ from typical *anthracinus* by larger size, generally paler and more brownish (less blackish) coloration, more extensive mottling on under wing coverts and remiges, and pure white instead of buff or pale buff lores and subocular streak. Our two specimens from Sonora, an adult male and female, have the upper wing coverts and secondaries browner than birds from Vera Cruz, but this would seem to be mostly due to fading, as fresh feathers appearing in the upper wing coverts of the male are as black as those in the examples from eastern Mexico. The other color characters given appear in many of our central American specimens as well as in the Sonoran birds. As to size, the Sonoran male has a wing of 380, well above the minimum of 365 mm. given by van Rossem, but the female has a wing 10 mm. less than the minimum of 395, given for that sex.

[2] With thirty specimens in adult plumage before us we cannot make out a case for recognizing either *cancrivorus* or *subtilis* in spite of what Aldrich (Sci. Pub. Cleveland Mus. Nat. Hist., 7, pp. 44–49, 1937) has written about the subject. Measurements vary a great deal, and while *certain* examples from the Pacific coast are indeed smaller, others, such as a female each from Mazatlan (wing, 400) and Bolaños (wing, 390), are fully as large as Atlantic birds. There is certainly nothing in the width of the white tail-band, which—measured on the middle rectrix—in four adults from St. Vincent (*cancrivorus*) varies from 20 to 40 mm. and attains 50 mm. in one from the Orinoco Delta (Guanoco). A Trinidad bird is exactly like the St. Vincent average. The white or buff (either one color alone or the two mixed together) base to the anterior dorsal feathers is a purely individual character. *Subtilis* (from the Pacific coast) is supposed to lack the light base, but as a matter of fact, in an adult male from Santa Lucia, Tumbez, Peru, which shows the small size of that form (wing, 330), the light-colored markings (basally white, subterminally bright ochraceous-buff) to the anterior dorsal plumage are much more extensive than in any other specimen. Similar are two adult males from Panama (wing, 350) and Chitrá, Veraguas (wing, 355), while a female from Mazatlan and another from La Libertad, El Salvador (wing, 378), have likewise a large amount of buff and white spotting at the base of the mantle feathers. Of the larger birds, a female from Tamaulipas (Sierra Madre), a male from Nuevo León (Sierra Mache), one from Orizaba, an unsexed adult from Vera Cruz (Vega del Casadero), and one from Guatemala (Dueñas) have no trace of light markings on the dorsal plumage. Among four birds from St. Vincent (*cancrivorus*), two have much pale spotting of buff or white, one has just a few scattered spots, and one none at all. The Trinidad bird has merely a few spots of buffy white at the

Field Museum Collection.—33: Mexico (Camoa, Sonora, 1; Guiracoba, Sonora, 1; San Blas, Tepic, 1; Tamalin, Vera Cruz, 1; Minatitlan, Vera Cruz, 2; Rio Lagartos, Yucatan, 1); El Salvador (Barra de Santiago, Ahuachapan, 1; Puento del Triunfo, Usulutan, 1; San Salvador, San Salvador, 1; Hacienda Zapotitan, La Libertad, 1); Guatemala (San José, Escuintla, 3; Concepción del Mar, Escuintla, 1); Honduras (Tegucigalpa, Tegucigalpa, 2; Monte Redondo, Tegucigalpa, 1; Utilla Island, 1); Nicaragua (San Emilio Rivas, 2); Costa Rica (Limón, 1; Filadelphia, Guanacaste, 1; Puntarenas, 1); Panama (Port Obaldia, Darien, 4); Colombia (Rio Atrato, Antioquia, 1); Venezuela (Escorial Amarillo, Merida, 1; Perija, Rio Cogollo, Zulia, 1); British Guiana (Georgetown, 1); Lesser Antilles (St. Vincent Island, 1).

*Buteogallus gundlachii (Cabanis).[1] CUBAN CRAB HAWK.

Hypomorphnus gundlachii(i) Cabanis, Journ. Orn., 2, "1854," Erinnerungsschrift, p. lxxx, 1855—coast of Cuba (type in Berlin Museum); Gundlach, in Poey, Repert. Hist. Nat. Cuba, 1, p. 223, 1865—Cuba; idem, Journ. Orn., 19, p. 365, 1871—coast of Cuba and Isle of Pines (habits, nest, and eggs).

Morphnus urubitinga (not *Falco urubitinga* Gmelin) Lembeye, Aves de Cuba, p. 14, pl. 3, fig. 3, 1850—Cuba; March, Proc. Acad. Nat. Sci. Phila., 1863, p. 3—"Jamaica" (sight record).

base, the one from Guanoco just as much as the two strongly marked St. Vincent specimens, and a female from Santa Marta (wing, 370) very nearly as much as the male from near Tumbez.

As to the rufescence of the wings, the Peruvian bird, in accordance with Bangs's description of the Gorgona Island form (*subtilis*), has the broad band across the secondaries bright cinnamon, redder than any other individual, though a male from Panama runs pretty close. All the others, regardless of locality, have the wing-band grayish, rarely tinged with dull rufescent, sometimes even obsolete. *Cancrivorus*—if we include under that heading birds from St. Vincent, Trinidad, and the Caribbean coast of Venezuela and Colombia—cannot be distinguished on that score from *anthracinus* (Atlantic coast of Central America).

Additional material examined (the numerous birds in juvenile plumage not included).—Mexico: Rio de Monterey, Nuevo León, 1; Sierra Mache, Nuevo León, 1; Tampico, Tamaulipas, 1; Sierra Madre, above Victoria, Tamaulipas, 1; Vega del Casadero, Vera Cruz, 2; Orizaba, Vera Cruz, 2; Cozumel Island, 1; Mazatlan, Sinaloa, 1; Bolaños, Jalisco, 1; unspecified, 3.—Guatemala: Dueñas, 2; San Gerónimo, 1.—Nicaragua: San Emilio, 1; Matagalpa, 1; Managua, 1.—Costa Rica: Puerto Jiménez, Golfo Dulce, 1.—Panama: Chitrá, Veraguas, 1; Panama, 1.—Colombia: Santa Marta, 1.—Peru: Santa Lucia, Tumbez, 1.—Venezuela: Guanoco, Orinoco Delta, 1.—Trinidad, 1.—St. Vincent, 4.

[1] *Buteogallus gundlachii* (Cabanis), autoptically unknown to me, may prove to be conspecific with *B. anthracinus*. According to Todd, it mainly differs by chocolate-brown instead of black coloration and by having the inner webs to the remiges broadly white instead of merely mottled with the same, while immature birds are duller in color with the barring on tibiae and tail somewhat less coarse. —C.E.H.

The specimen now in Field Museum corroborates Mr. Todd's remarks.—B.C.

Urubitinga anthracina (not *Falco anthracinus* Lichtenstein) Sharpe, Cat. Bds. Brit. Mus., **1**, p. 215, 1874—part, Cuba; Cory, Auk, **4**, p. 42, 1887—part, Cuba and "Jamaica"; idem, Cat. W. Ind. Bds., p. 99, 1892—part, Cuba, Isle of Pines, and "Jamaica"; Gundlach, Orn. Cub., pp. 18, 19, 1893—Cuba and Isle of Pines; Bangs and Zappey, Amer. Natur., **39**, p. 191, 1905—Isle of Pines (no specimens).

Urubitinga gundlachii Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, No. 2, p. 173, 1874—part, Cuba; Bangs, Auk, **22**, p. 307, 1905—Cayo Romano, Puerto Principe, Cuba (crit.; habits, nest, and eggs); Todd, Ann. Carnegie Mus., **10**, p. 193, 1916—Los Indios and Caleta Grande, Isle of Pines (crit.); Swann, Syn. Accip., p. 98, 1922—Cuba; Barbour, Mem. Nutt. Orn. Cl., **6**, p. 47, 1923—Cuba (habits); Swann, Monog. Bds. Prey, **1**, p. 461, 1930 (monog.).

Urubitinga anthracina gundlachii Swann, Syn. List Accip., p. 58, 1919—Cuba.

Buteogallus gundlachii Peters, Bds. World, **1**, p. 245, 1931 (range).

Range.—Cuba and Isle of Pines, Greater Antilles.

Field Museum Collection.—1: Cuba (eastern part, 1).

Genus BUSARELLUS Lesson

Busarellus "Lafresnaye"[1] Lesson, Écho du Monde Sav., 10e année, 2nd sém., No. 20, col. 468, Sept. 10, 1843—type, by orig. desig., *Circus busarellus* Vieillot=*Falco nigricollis* Latham.

Ichthyoborus Kaup, Contr. Orn., 1850, p. 76—type, by monotypy, *Falco nigricollis* Vieillot.

*Busarellus nigricollis nigricollis (Latham). BLACK-COLLARED HAWK.

Falco nigricollis Latham, Ind. Orn., **1**, p. 35, 1790—based on "Black-necked Falcon" Latham, Gen. Syn. Bds., Suppl., p. 30, Cayenne (type in the Leverian Museum).[2]

Falco busarellus Daudin, Traité d'Orn., **2**, p. 168, 1800—based on "Le Buserai" Levaillant, Hist. Nat. Ois. Afr., **1**, p. 84, pl. 20, Cayenne; Wied, Reise Bras., **1**, p. 110 (8vo ed., p. 108), 1820—Battuba, near Lagõa Feia, Rio de Janeiro; idem, Beitr. Naturg. Bras., **3**, (1), p. 213, 1830—Rio de Janeiro (Cabo Frio, Rio Parahyba, Goaytacases, Lagõa Marica, Lagõa Feia, Battuba).

Falco melanobronchos Shaw, Gen. Zool., **7**, (1), p. 167, 1809—Cayenne (type in Leverian Museum).

Buteo nigricollis Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **4**, p. 473, 1816—locality unknown; idem, Tabl. Enc. Méth., Orn., livr. 93, p. 1221, 1823

[1] *Busarellus* Lafresnaye (Rev. Zool., **2**, p. 196, 1839) is a nomen nudum. In d'Orbigny's Dict. Univ. Hist. Nat., **2**, p. 785, 1842, the name is cited by Lafresnaye as "synonyme latin du sous-genre Buseray," which is likewise without standing, as no authority is given.

[2] This specimen did not come to the Vienna Museum.

(type in Paris Museum; cf. Pucheran, Rev. Mag. Zool., (2), **2**, p. 85, 1850); Burmeister, Syst. Uebers. Th. Bras., **2**, p. 47, 1855—Guiana and Brazil (part);[1] Schlegel, Mus. Pays-Bas, Buteones, p. 18, 1862—Surinam; Lawrence, Mem. Bost. Soc. N. H., **2**, p. 302, 1874—Mazatlan, Sinaloa.

Aquila milvoides Spix, Av. Spec. Nov. Bras., **1**, p. 5, pl. 1d, 1824—"in sylvis flum. Amazonum" (type in Munich Museum; cf. Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **22**, No. 3, p. 568, 1906).

Buteo busarellus d'Orbigny, Voy. Amér. Mérid., Ois., p. 103, 1836—part, Moxos and Chiquitos, Bolivia; Lafresnaye and d'Orbigny, Syn. Av., **1**, in Mag. Zool., **7**, cl. 2, p. 6, 1837—part, Moxos and Chiquitos, Bolivia.

Ichthyoborus busarellus Cabanis, in Schomburgk, Reisen Brit. Guiana, **3**, "1848," p. 739, 1849—savanna rivers.

Buteogallus nigricollis Sclater and Salvin, Ibis, 1859, p. 216—near Santana Mixtan, Guatemala; Cassin, Proc. Acad. Nat. Sci. Phila., 1860, p. 132—Rio Truando, Colombia; Sclater, Proc. Zool. Soc. Lond., **28**, p. 253, 1860—vicinity of Orizaba, Vera Cruz, Mexico; idem and Salvin, l.c., 1866, p. 198—Sarayacu, Peru; iidem, l.c., 1873, p. 302—Sarayacu and Santa Cruz, Peru; Taczanowski, Orn. Pér., **1**, p. 111, 1884—Peru (Sarayacu, Santa Cruz, "Santa Lucia").

Ichthyoborus nigricollis Pelzeln, Verh. Zool. Bot. Ges. Wien, **12**, pp. 139, 181, 1862—Goyáz (Rio Araguay), Matto Grosso (Cuyabá, Caiçara, Rio do Cabaçal), and Forte do Rio Branco, Brazil (soft parts); idem, Orn. Bras., **1**, p. 3, 1868—same localities.

Urubitinga nigricollis Sclater and Salvin, Proc. Zool. Soc. Lond., 1867, p. 589—Mexiana Island, Brazil.

Busarellus nigricollis Sharpe, Cat. Bds. Brit. Mus., **1**, p. 211, 1874—Brazil (Mexiana Island) and British Guiana (Demerara); Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, No. 2, p. 142, 1876—part, Brazil, Colombia (Rio Truando), Amazonia, and Mexico (Mazatlan) (monog.); Sumichrast, La Naturaleza, **5**, p. 236, 1881—Los Ventorillos, near Tlacotalpam, Vera Cruz, Mexico; Nutting, Proc. U. S. Nat. Mus., **5**, p. 404, 1882—La Palma de Nicoya, Costa Rica (descr. of young); idem, l.c., **6**, p. 395, 1884—Island of Ometépe, Lake Nicaragua; Salvin, Ibis, 1886, p. 74—British Guiana (ex Cabanis); Zeledón, Anal. Mus. Nac. Costa Rica, **1**, p. 126, 1887—Las Trojas and Liberia, Costa Rica; Berlepsch, Journ. Orn., **37**, p. 317, 1889—Sarayacu, Ucayali, Peru; Riker and Chapman, Auk, **8**, p. 161, 1891—Santarém, Brazil; Richmond, Proc. U. S. Nat. Mus., **16**, p. 522, 1893—Greytown, Nicaragua; Salvadori and Festa, Boll. Mus. Zool. Torino, **14**, No. 339, p. 10, 1899—Laguna de Pita, Darien; Ihering, Rev. Mus. Paul., **3**, p. 354, 1899—Piracicaba, São Paulo; idem, l.c., **4**, p. 162, 1900—Cantagallo and Nova Friburgo, Rio de Janeiro; Bangs, Proc. New Eng. Zool. Cl., **2**, p. 15, 1900—Loma del Leon, Panama; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 85, 1900—Mexico (Mazatlan and Presidio, Sinaloa; near Tlacotalpam, Vera Cruz), Guatemala (Santana Mixtan, Dueñas, Lake Petén), Nicaragua (Ometépe, Greytown), Costa Rica (La Palma, Las Trojas, Liberia), and Panama (Laguna

[1] The author confuses the species with *Buteogallus aequinoctialis*, considered to represent one of its plumages.

de Pita, Rio Truando); Allen, Bull. Amer. Mus. N. H., **13**, p. 130, 1900—Bonda, Colombia; Berlepsch and Hartert, Nov. Zool., **9**, p. 113, 1902—Quiribana de Caicara and Caicara, Orinoco, Venezuela; Ihering, Cat. Faun. Braz., **1**, p. 91, 1907—Piracicaba, São Paulo; Hagmann, Zool. Jahrb. (Syst.), **26**, p. 21, 1907—Mexiana Island (habits); Hellmayr, Nov. Zool., **14**, pp. 29, 38, 1907—Urucurituba, Rio Tapajóz, and Obidos; idem, l.c., **14**, p. 406, 1907—Humaytá, Rio Madeira; Berlepsch, l.c., **15**, p. 293, 1908—Cayenne; Beebe, Zoologica (N.Y.), **1**, p. 80, 1909—La Brea, Orinoco Delta, Venezuela; Hellmayr, Nov. Zool., **17**, p. 411, 1910—Humaytá, Rio Madeira; Reiser, Denks. Math.-Naturw. Kl. Akad. Wiss. Wien, **76**, p. 90, 1910—Bahia (Lagõa do Boqueirão, Rio Grande) and Piauhy (Pedrinha and Lagõa do Missão, near Parnaguá); Carriker, Ann. Carnegie Mus., **6**, p. 460, 1910—Bolsón, Costa Rica; Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **26**, No. 2, p. 121, 1912—Mexiana Island; Stone, Proc. Acad. Nat. Sci. Phila., **65**, p. 195, 1913—La Pedrita and Caño Corosal, Orinoco Delta, Venezuela; Snethlage, Bol. Mus. Goeldi, **8**, p. 132, 1914—Marajó (São Natal), Mexiana, and Cussary; Chubb, Bds. Brit. Guiana, **1**, p. 243, 1916—Abary River, Rupununi River, and Demerara; Cherrie, Sci. Bull., Mus. Brookl. Inst., **2**, p. 343, 1916—middle Orinoco Valley; Chapman, Bull. Amer. Mus. N. H., **36**, p. 247, 1917—Rio Atrato and Calamar, Colombia; Bangs and Penard, Bull. Mus. Comp. Zool., **62**, p. 36, 1918—vicinity of Paramaribo, Surinam; Rendahl, Ark. Zool., **12**, No. 8, p. 9, 1919—Rio Menares, Nicaragua; Swann, Syn. List Accip., p. 57, 1919—part, Brazil, Guiana, and Peru; Todd and Carriker, Ann. Carnegie Mus., **14**, p. 155, 1922—Bonda, Mamatoco, Trojas de Cataca, and Fundación, Colombia; Stone, Proc. Acad. Nat. Sci. Phila., **80**, p. 154, 1928—near Pará, Brazil; Young, Ibis, 1929, p. 9—coastland of British Guiana (habits); Darlington, Bull. Mus. Comp. Zool., **71**, p. 367, 1931—near Ciénaga Grande, Sevilla, and Rio Frio, Magdalena, Colombia; Griscom, Bull. Amer. Mus. N. H., **64**, p. 156, 1932—Hacienda California and Ocos, Guatemala (crit.); Carriker and de Schauensee, Proc. Acad. Nat. Sci. Phila., **87**, p. 415, 1935—Quiriguá, Guatemala; Dugand, Rev. Acad. Colomb. Cienc., Bogotá, **4**, p. 398, pl. 6, fig. 32, 1941—Colombia; Brodkorb, Misc. Pub., Mus. Zool. Univ. Mich., **55**, p. 28, 1943 (disc. races).

Busarellus nigricollis nigricollis Swann, Syn. Accip., p. 95, 1922 (range); Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **12**, p. 461, 1929—Piauhy; Swann, Monog. Bds. Prey, **1**, p. 446, pl. [26], upper fig., 1930 (monog.); Naumburg, Bull. Amer. Mus. N. H., **60**, p. 109, 1930—Matto Grosso; Laubmann, Wiss. Erg. Deuts. Gran Chaco Exp., Vögel, p. 107, 1930—San José, Bolivia (crit.); Peters, Bds. World, **1**, p. 245, 1931 (range); Stone and Roberts, Proc. Acad. Nat. Sci. Phila., **86**, p. 372, 1934—Descalvados, Matto Grosso; Griscom, Bull. Mus. Comp. Zool., **78**, p. 300, 1935—Panama; Pinto, Rev. Mus. Paul., **20**, p. 52, 1936—Goyáz; Gyldenstolpe, K. Svensk. Vetensk. Akad. Handl., (3), **22**, p. 28, 1945—João Pessõa, Rio Juruá, Brazil; idem, l.c., (3), **23**, p. 53, 1945—Bolivia, El Beni (Victoria; Bresta).

Busarellus nigricollis macropus Swann, Syn. Accip., p. 95, Jan. 5, 1922—Tally Pan, Manatee River, British Honduras (type in Museum of Comparative

Zoology, Cambridge, Mass.); idem, Monog. Bds. Prey, 1, p. 448, 1930—Guatemala and British Honduras.

Busarellus nigricollis australis Bond and de Schauensee, Proc. Acad. Nat. Sci. Phila., 95, p. 178, 1943—Chatarona, Bolivia.

Range.—Locally in swampy places from Mexico (Sinaloa and Vera Cruz) through Central America to Colombia, eastern Peru, Venezuela, the Guianas, eastern Bolivia, and Brazil south to São Paulo and Matto Grosso.[1]

Field Museum Collection.—42: El Salvador (San Sebastian, La Paz, 1); Colombia (El Palmar de Varela, Atlantico, 1); Venezuela (Encontrados, Zulia, 3); British Guiana (Georgetown, 1; Charity, 1; Buxton, 6); Brazil (Serra da Lua, Amazonas, 1; Canutama, Rio Purús, 3; Labrea, Rio Purús, 1; João Pessõa, Rio Juruá, 1; Itacoatiara, Rio Amazonas, 4; Igarape Aniba, Amazonas, 4; Lago Baptista, Amazonas, 4; Boca Ituqui, Pará, 3; Caxiricatuba, Rio Tapajoz, 4; Obidos, Rio Amazonas, 3; Descalvados, Matto Grosso, 1).

***Busarellus nigricollis leucocephalus** (Vieillot).[2] SOUTHERN BLACK-COLLARED HAWK.

Circus leucocephalus Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., 4, p. 465, 1816—based on "Gavilán de Estero cabeza blanca" Azara, No. 13, Paraguay.

Buteo busarellus (not *Falco busarellus* Daudin) d'Orbigny, Voy. Amér. Mérid., Ois., p. 103, 1836—part, Corrientes, Argentina; Lafresnaye and d'Orbigny, Syn. Av., 1, in Mag. Zool., 7, cl. 2, p. 6, 1837—part, Corrientes.

Busarellus nigricollis (not *Falco nigricollis* Latham) Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., 2, No. 2, p. 142, 1876—part, Paraguay; Berlepsch, Journ. Orn., 35, p. 28, 1887—Lambaré, Paraguay; Kerr, Ibis, 1892, p. 142—Fortín Donovan, lower Pilcomayo; Salvadori, Boll. Mus. Zool. Torino, 10, No. 208, p. 20, 1895—Colonia Risso, Paraguay; Kerr, Ibis, 1901, p. 230—Villa Concepción, Paraguay; Hartert and Venturi, Nov. Zool., 16, p. 239, 1909—Mocoví, Chaco; Grant, Ibis, 1911, p. 331—Riacho Ancho, Formosa, and near Villa Franca, Paraguay; Bertoni,

[1] In agreement with Griscom, we are quite unable to distinguish Guatemalan birds (*macropus*) from those of Costa Rica (Bebedéro) and South America either in coloration or size. Even eight specimens from Brazil (Piauhy, Bahia, and Matto Grosso) cannot be separated, although they are on average very slightly larger (wing of males, 380–400, of females, 400–420).

Thirty specimens in adult plumage examined.

[2] *Busarellus nigricollis leucocephalus* (Vieillot) may be maintained on account of its somewhat larger size and whiter (less buffy) coloration of the head. Two specimens from Paraguay (*leucocephalus*) agree perfectly with others from the Argentine Chaco (*australis*), the former name having many years' priority. Wing, 410–420, (females) 425–445.

Additional material examined.—Paraguay: Villa Concepción, 1; Rio Pilcomayo, 1.—Argentina: Lapango, Formosa, 2; Rio de Oro, Santa Fé, 1.

Faun. Parag., p. 42, 1914—Paraguay; Swann, Syn. List Accip., p. 57, 1919—part, Paraguay; Arribálzaga, El Hornero, 2, p. 92, 1920—Chaco; Ménégaux, Rev. Franç. d'Orn., 1925, p. 282—Rio Tapenaga, Santa Fé.

Busarellus nigricollis australis Swann, Syn. Accip., p. 95, Jan. 2, 1922—"Morovi, Argentina"=Mocoví, Santa Fé (type in Tring Collection, now in the American Museum of Natural History, New York); Hartert, Nov. Zool., 32, p. 267, 1925 (crit.); Swann, Monog. Bds. Prey, 1, p. 448, 1930—Paraguay and Argentina; Laubmann, Wiss. Erg. Deuts. Gran Chaco Exp., Vögel, p. 107, 1930—Lapango, Formosa, and Rio de Oro, Santa Fé (crit.); Peters, Bds. World, 1, p. 245, 1931 (range).

Busarellus nigricollis leucocephalus Steullet and Deautier, Obr. Cinc. Mus. La Plata, 1, p. 446, 1936 (range; crit.).

Range.—Paraguay and northern Argentina, in provinces of Corrientes, Santa Fé, Chaco, and Formosa.

Field Museum Collection.—6: Paraguay (Horqueta, 1; Rosario, 4; 120 km. west of Puerto Pinasco, 1).

Genus HARPYHALIAETUS Lafresnaye

Harpyhaliaetus Lafresnaye, Rev. Zool., 5, p. 173, 1842—type, by orig. desig., *Harpyia coronata* Vieillot.

Urubitornis J. Verreaux, Proc. Zool. Soc. Lond., 24, p. 145, Nov. 11, 1856—type, by orig. desig., *Circaëtus solitarius* Tschudi.

Plangus Sundevall, Öfv. Vet.-Akad. Handl., 1874, No. 2, p. 28, 1874—type, by monotypy, *Plangus neogaeus* Sundevall.

*Harpyhaliaetus coronatus coronatus (Vieillot).[1] CROWNED HARPY EAGLE.

Harpyia coronata Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., 14, p. 237, 1817—based on "Aguila coronada" Azara, Apunt. Hist. Nat. Pax., No. 7, Paraguay and La Plata River.

Falco coronatus Temminck, Nouv. Rec. Pl. Col., livr. 40, pl. 234 (=adult), Nov., 1823—Brazil, Paraguay, and La Plata.

Circaëtus coronatus d'Orbigny, Voy. Amér. Mérid., Ois., p. 75, 1834—Patagonia (banks of the Rio Negro) and Corrientes; Lafresnaye and d'Orbigny, Syn. Av., 1, in Mag. Zool., 7, cl. 2, p. 3, 1837—Patagonia and "Brazil"; Pelzeln, Verh. Zool. Bot. Ges. Wien, 12, pp. 168, 192, 1862—Itararé and Araguay, Brazil (soft parts); idem, Orn. Bras., 1, p. 4, 1867—São Paulo (Itararé, Rio Paraná) and Goyáz (Araguay).

Harpyhaliaetus coronatus Lafresnaye, Rev. Zool., 5, p. 173, 1842 (crit.); Hudson (and Sclater), Proc. Zool. Soc. Lond., 1872, p. 536—Rio Negro; Lee, Ibis, 1873, p. 136—banks of the Rio Gato, Entre Ríos; Sharpe,

[1] *Aquila sellowii* "Wied" and Bonaparte (Rev. Mag. Zool., (2), 2, p. 488, 1850) and *Haliaëtus unifasciatus* "Gray" apud Kaup (Isis, 1847, col. 209) are unpublished manuscript names.

Cat. Bds. Brit. Mus., **1**, p. 221, 1874—part, spec. a, b (descr. of adult); Gurney, Ibis, 1876, pp. 490, 491, 492—Patagonia, Bolivia, and southern Brazil (crit.; descr. of young); Sclater and Hudson, Arg. Orn., **2**, p. 66, 1889—Rio Negro (habits); Stempelmann and Schulz, Bol. Acad. Nac. Cienc. Córdoba, **10**, p. 396, 1890—Córdoba; Kerr, Ibis, 1892, p. 142—Fortín Page, lower Pilcomayo; Allen, Bull. Amer. Mus. N. H., **5**, p. 146, 1893—Chapada, Matto Grosso; Ihering, Ann. Est. Rio Grande do Sul, **16**, p. 140, 1899—São Lourenço, Rio Grande do Sul; idem, Rev. Mus. Paul., **3**, p. 357, 1899—São Paulo; Lillo, Anal. Mus. Nac. Buenos Aires, **8**, p. 204, 1902—Rio Vipos, Tucumán; idem, Rev. Letr. Cienc. Soc., **3**, No. 13, p. 62, 1905—Rio Vipos; Ihering, Cat. Faun. Braz., **1**, p. 93, 1907—part, Brazil, Argentina, and Paraguay; Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 246, 1910—Rio Negro, Córdoba, and Tucumán; Kothe, Orn. Monatsber., **20**, p. 2, 1912—"Montevideo, Uruguay" (plumages); Bertoni, Faun. Parag., p. 42, 1914—Alto Paraná, Paraguay; Reed, Av. Prov. Mendoza, p. 21, 1916—San Rafael and Tupungato; Hellmayr, Nov. Zool., **28**, p. 176, 1921 (range); Swann, Syn. Accip., p. 102, 1922 (chars.; range); Giacomelli, El Hornero, **3**, p. 77, 1923—La Rioja; Ménégaux, Rev. Franç. d'Orn., 1925, p. 284—fifteen km. south of Icaño, Santiago del Estero; Naumburg, Bull. Amer. Mus. N. H., **60**, p. 110, 1930—Matto Grosso; Swann, Monog. Bds. Prey, **1**, p. 475, col. pl., lower fig. (adult), 1930 (monog.); Peters, Bds. World, **1**, p. 246, 1931 (range); Anon., El Hornero, **4**, p. 458, 1931—Patquía, La Rioja; Stone and Roberts, Proc. Acad. Nat. Sci. Phila., **76**, p. 372, 1934—Descalvados and Rio Xingú, Matto Grosso; Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 447, 1936 (range in Argentina; bibliog.).

Asturina azarae Kaup, Isis, 1847, col. 209—new name for *Falco coronatus* Temminck (Nouv. Rec. Pl. Col., pl. 234) and Azara, No. 7 (descr. of adult); idem, Contr. Orn., 1850, p. 68 (crit.).

Plangus neogaeus Sundevall, Öfv. Vet.-Akad. Handl., 1874, No. 2, p. 28, 1874—Caldas, Brazil (descr. of young; type in Stockholm Museum; cf. Gyldenstolpe, Ark. Zool., **19**, A, No. 1, p. 90, 1926); Sharpe, Bull. Brit. Orn. Cl., **6**, p. xii, 1896 (crit.).

Harpyhaliaetus coronatus coronatus Swann, Syn. List Accip., p. 61, 1919 (range).

Range.—Eastern Bolivia; southern Brazil from Matto Grosso (Chapada, Descalvados, Rio Xingú) and Goyáz (Rio Araguay) to São Paulo (Itararé, Rio Paraná) and Rio Grande do Sul (São Lourenço); Paraguay;[1] northern Argentina (Rio Vipos, Tucumán; Patquía, La Rioja; Mendoza; Corrientes; Rio Gato, Entre Ríos; lower Rio Negro).[2]

[1] The locality "Montevideo, Uruguay," attached to two of Sellow's specimens in the Berlin Museum, is open to doubt. The Crowned Harpy Eagle has never again been obtained in Uruguay.

[2] *Additional material examined.*—Brazil: Itararé, São Paulo, 1 (female); Rio Paraná, São Paulo, 1 (adult male); unspecified, 2.—Paraguay: Villa Rica, 1 (adult male); Fortín Page, lower Pilcomayo, 1 (young female).—Bolivia: unspecified, 1 (adult).

Field Museum Collection.—4: Paraguay, Chaco (200 km. west of Puerto Casado, 3; Lago General Diaz, 110 km. west of Puerto Casado, 1).

Harpyhaliaetus coronatus solitarius (Tschudi).[1] SOLITARY HARPY EAGLE.

Circaëtus solitarius Tschudi, Arch. Naturg., **10**, (1), p. 264, 1844—Peru (descr. of adult male; type in Neuchâtel Museum); idem, Unters. Faun. Peru., Orn., p. 94, pl. 2, 1846—Chanchamayo, Peru.

Urubitornis solitaria(us) Verreaux, Proc. Zool. Soc. Lond., **24**, p. 145, 1856—Santa Marta, Colombia (crit.; descr. of adult and young); Salvin, l.c., 1870, p. 214—Calóbre, Veraguas; Kothe, Orn. Monatsber., **20**, p. 4, 1912—Colombia (crit.; plumages); Swann, Syn. Accip., p. 103, 1922 (chars.; range); Todd and Carriker, Ann. Carnegie Mus., **14**, p. 155, 1922—Agua Dulce, Santa Marta, Colombia (descr. of adult and young); Swann, Monog. Bds. Prey, **1**, p. 477, col. pl., upper figures (adult and young), 1930 (monog.); Peters, Bds. World, **1**, p. 246, 1931 (range); Griscom, Bull. Amer. Mus. N. H., **64**, p. 158, 1932—Guatemala; idem, Bull. Mus. Comp. Zool., **78**, p. 300, 1935—Veraguas.

Harpyhaliaetus coronatus (not *Harpyia coronata* Vieillot) Sharpe, Cat. Bds. Brit. Mus., **1**, p. 221, 1874—part, spec. c, "Chile"; Taczanowski, Orn. Pér., **1**, p. 129, 1884—Peru (Chanchamayo, Amable Maria); idem and Berlepsch, Proc. Zool. Soc. Lond., 1885, p. 110—El Topo, eastern Ecuador;

[1] *Harpyhaliaetus coronatus solitarius* (Tschudi) differs by rather shorter, deeper bill, somewhat shorter wings and tail, and much darker coloration. Adult birds are much darker, more slaty (a deep neutral gray instead of mouse gray) and evidently lack the long crest of the nominate race, although the occipital feathers are slightly lengthened. The juvenile plumage is somewhat blacker above and much more heavily blotched and spotted below, these markings being, besides, black rather than dark brown, while the light-colored portions of the feathers of the under parts as well as the superciliaries are much deeper in tone, ochraceous-buff to ochraceous-tawny rather than buffy white. There is no constant difference in the shape of the nostrils, which varies a great deal individually, and we cannot see in *H. c. solitarius* anything but a well-marked northern race.

MEASUREMENTS

	Wing	Tail
H. c. coronatus		
Adult male from Villa Rica, Paraguay	545	285
Adult (unsexed) from Bolivia	530	280
Adult male from Rio Paraná, São Paulo	535	300
Adult female from Itararé, São Paulo	555	310
Young female from Fortín Page, Paraguay	530	285
H. c. solitarius		
Adult (unsexed) from Chiquinda, Ecuador	510	240
Adult female from "Chile(?)"	520	260
Young (unsexed) from Cauca Valley, Colombia	500	260
Young male from coast near Puerto Cabello, Venezuela	500	290
Two unsexed young from Calóbre, Veragua	500, 500	270, 280
One (unsexed) young from Isthmus of Tehuantepec	465	260

Material examined.—Mexico: Isthmus of Tehuantepec, 1.—Panama: Calóbre, Veraguas, 2.—Colombia: Cauca Valley, 1.—Venezuela: coast near Puerto Cabello, 1.—Ecuador: Chiquinda, 1.—"Chile(?)," 1.

Ihering, Cat. Faun. Braz., 1, p. 93, 1907—part, "Chile" to Colombia and Guatemala; Chapman, Bull. Amer. Mus. N. H., 55, p. 235, 1926—Ecuador (El Topo).

Harpyhaliaetus solitarius Gurney, Ibis, 1876, pp. 490, 491, 492—"Chile," Peru, New Granada (Antioquia), Veragua, Guatemala (San Gerónimo), and southern Mexico (crit.; descr. of young); Salvin and Godman, Biol. Centr.-Amer., Aves, 3, p. 87, 1900—Mexico (Tehuantepec), Guatemala (San Gerónimo), Panama (Calóbre), and south to Venezuela and "Chile"; Chapman, Bull. Amer. Mus. N. H., 55, p. 235, 1926—Sabanilla, Ecuador.

Geranoëtus melanoleucus (errore) Allen, Bull. Amer. Mus. N. H., 13, p. 130, 1900—Agua Dulce, Santa Marta region, Colombia.

Harpyhaliaetus coronatus solitarius Swann, Syn. List Accip., p. 61, 1919 (chars.; range).

Range.—Tropical zone of southern Mexico (Isthmus of Tehuantepec), Guatemala (San Gerónimo), Panama (Calóbre, Veraguas), Colombia (Agua Dulce, Santa Marta region; Cauca Valley), Venezuela (near Puerto Cabello), Ecuador (Chiquinda; El Topo, Rio Pastaza; Sabanilla, near Zamora), and Peru (Chanchamayo; Amable Maria).[1]

Genus MORPHNUS Dumont

Morphnus Dumont, Dict. Sci. Nat., 1, Suppl., p. 88, Oct., 1816—type, by subs. desig. (Chubb, Bds. Brit. Guiana, 1, p. 252, 1916), *Falco guianensis* Daudin.

Morphinus Fleming, Phil. Zool., 2, p. 235, 1822—type, by monotypy, *Falco guianensis* Daudin.

*Morphnus guianensis (Daudin). GUIANAN CRESTED EAGLE.

Falco guianensis Daudin, Traité Élém. d'Orn., 2, p. 78, 1800—based on "Petit Aigle de la Guiane" Mauduyt, Enc. Méth., Hist. Nat. Ois., 1, p. 475, "Guiane"=French Guiana; Wied, Reise Bras., 2, p. 143, 1821—Rio da Cachoeira, Bahia; idem, Beitr. Naturg. Bras., 3, (1), p. 90, 1830—Rio da Cachoeira, Bahia, Brazil.

Falco sonnini Shaw, Gen. Zool., 7, (1), p. 67, 1809—based on "Petit Aigle de la Guiane" Sonnini, in Buffon, Hist. Nat. Gén. et Part., 38, p. 62, French Guiana.

Falco delicatus Shaw, Gen. Zool., 7, (1), p. 68, 1809—based on "Petit Aigle de la Guiane" Mauduyt, Enc. Méth., Hist. Nat. Ois., 1, p. 475, Guiana.

[1] No authentic record exists for the occurrence of either race of this species in Chile. Cf. Hellmayr, Field Mus. Nat. Hist., Zool. Ser., 19, p. 278, 1932. The British Museum specimen labeled "Chile(?)," purchased from Verreaux, seems to be the only basis for the inclusion of Chile in the range of the Harpy Eagle by various authors, but its origin is altogether uncertain. Albert's statement (Anal. Univ. Chile, 108, p. 277, 1901), that *Harpyhaliaëtus coronatus* is fairly rare in Chile, frequenting the vicinity of water and the seacoast, appears to be without foundation.

Morphnus guianensis Cuvier, Règne Anim., **1**, p. 318, "1817" [=Dec. 7, 1816]—Guiana; Cabanis, in Schomburgk, Reisen Brit. Guiana, **3**, p. 738, 1848—Tuarutu Mountains, Canuku Mountains, and coast region; Burmeister, Syst. Uebers. Th. Bras., **1**, p. 66, 1855—Rio Ilhéos, Bahia, and Cantagallo, Rio de Janeiro; Cassin, Proc. Acad. Nat. Sci. Phila., 1860, p. 132—Rio Truando, Colombia; Pelzeln, Journ. Orn., **8**, p. 337, 1860—Guiana and Brazil (Barra do Rio Negro; Lago Manaqueri, Rio Solimões) (plumages); idem, Verh. Zool. Bot. Ges. Wien, **12**, pp. 167, 190, 1862—same localities; Wied, Journ. Orn., **11**, p. 1, 1863 (plumages); Pelzeln, l.c., p. 121, 1863 (plumages); idem, Orn. Bras., **1**, p. 4, 1867—Barra do Rio Negro [=Manáos] and Lago do Manaqueri, Brazil; Sclater and Salvin, Proc. Zool. Soc. Lond., 1867, p. 753—Chyavetas, Peru; iidem, l.c., 1873, p. 302—Chyavetas and Yurimaguas, Peru; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 222, 1874—British Guiana, Amazonia, and Panama; Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, No. 2, p. 149, 1876—Rio Truando (monog.); Gurney, Ibis, 1877, p. 435 (descr. of immature); idem, l.c., 1878, p. 80 (soft parts); Taczanowski, Orn. Pér., **1**, p. 133, 1884—Cayenne and Peru (Chyavetas, Yurimaguas); Berlepsch and Ihering, Zeits. Ges. Orn., **2**, p. 169, 1885—Arroio Grande, Rio Grande do Sul; Salvin, Ibis, 1886, p. 75—Bartica Grove, British Guiana; Ihering, Ann. Est. Rio Grande do Sul, **16**, p. 140, 1899—Mundo Novo, Rio Grande do Sul; idem, Rev. Mus. Paul., **4**, p. 163, 1900—Cantagallo, Rio de Janeiro; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 88, pl. 63, 1900—Panama (Lion Hill, Rio Truando) and South America; Bertoni, Anal. Cient. Parag., **1**, No. 1, p. 154, 1901—Alto Paraná, Paraguay; Ihering, Rev. Mus. Paul., **5**, "1901," p. 282, 1902—Apiahy, São Paulo; Bangs, Bull. Mus. Comp. Zool., **39**, p. 142, 1903—Ceiba, Honduras; Ihering, Rev. Mus. Paul., **6**, "1904," p. 450, 1905—Rio Juruá, Brazil; idem, Cat. Faun. Braz., **1**, p. 94, 1907—São Paulo (Apiahy) and Amazonas (Rio Juruá); Berlepsch, Nov. Zool., **15**, p. 291, 1908—Cayenne; Carriker, Ann. Carnegie Mus., **4**, p. 302, 1908—Cuábre, Rio Sícsola, Costa Rica; idem, l.c., **6**, p. 464, 1910—same locality; Bertoni, Anal. Soc. Cient. Arg., **75**, p. 79, 1913—Santa Ana, Misiones; idem, Faun. Parag., p. 43, 1914—Alto Paraná, Paraguay; Snethlage, Bol. Mus. Goeldi, **8**, p. 135, 1914—Amazonia (listed); Chubb, Bds. Brit. Guiana, **1**, p. 252, 1916—Mazaruni River, Bartica, Hoorie Creek, Tuarutu and Canuku Mountains; Swann, Syn. Accip., p. 103, 1922 (chars.; range); Bertoni, El Hornero, **3**, p. 398, 1926—Puerto Bertoni, Paraguay; Swann, Monog. Bds. Prey, p. 479, 1930 (monog.); Peters, Bds. World, **1**, p. 246, 1931—Honduras to Peru and Paraguay; idem, Bull. Mus. Comp. Zool., **71**, p. 309, 1931—Banana River and Changuinola, Almirante Bay, Panama; Griscom, l.c., **72**, p. 315, 1932—Obaldia, Panama; idem, l.c., **78**, p. 300, 1935—Panama (Almirante, Canal Zone, Darien); Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 449, 1936 (range); Dugand, Rev. Acad. Colomb. Cienc., Bogotá, **4**, p. 395, pl. 2, fig. 11, 1941—Colombia; idem, Caldasia, **1**, No. 3, p. 57, 1941—Rio Salaqui, Choco, Colombia; Lehmann, l.c., **2**, 3 pls., p. 165, 1943 (plumages).

Spizaëtus variegatus Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **32**, p. 59, 1819—Cayenne.

Morphnus cristatus Lesson, Traité d'Orn., livr. 1, p. 51, pl. 11, fig. 2, Feb., 1830—Guiana.

Asturina guianensis Kaup, Isis, 1847, col. 201—Brazil and Guiana (descr.); Schlegel, Mus. Pays-Bas, Astures, p. 25, 1862—"Nouvelle Grenade," Guiana, and Surinam.

Morphnus taeniatus Gurney, Ibis, (4), 3, p. 176, pl. 3, April, 1879—Sarayacu, eastern Ecuador (type in Salvin-Godman Collection, now in British Museum, examined); Swann, Syn. Accip., p. 103, 1922—Ecuador; Chapman, Bull. Amer. Mus. N. H., 55, p. 235, 1926—below San José, Ecuador; Swann, Monog. Bds. Prey, 1, p. 481, 1930—eastern Ecuador (Sarayacu, below San José); Peters, Bds. World, 1, p. 246, 1931—eastern Ecuador; Griscom, Bull. Mus. Comp. Zool., 72, p. 315, 1932—Permé, eastern Panama; idem, l.c., 78, p. 301, 1935—Permé.

Morphnus guianensis guianensis Swann, Syn. List Accip., p. 61, 1919 (chars.; range).

Morphnus guianensis taeniatus Swann, Syn. List Accip., p. 61, 1919—Ecuador (chars.).

Range.—Tropical zone of Honduras (one record each from Ceiba and San Pedro Sula), Costa Rica (one record from Cuábre, Rio Sícsola, Talamanca), Panama (various records from Almirante, Canal Zone, and Darien), Colombia (Remedios, Rio Ité; Rio Salaqui, Choco, etc.), eastern Ecuador (Sarayacu, below San José), eastern Peru (Chyavetas, Yurimaguas), Bolivia (Buena Vista, Santa Cruz), the Guianas, and Brazil (from the Amazon to Rio Grande do Sul) south to Paraguay (Puerto Bertoni) and Misiones (Santa Ana), Argentina.[1]

Field Museum Collection.—8: Panama (Port Obaldia, Darien, 2); Colombia, Choco (Rio Jurado, 1; Rio Jamparado, 1); Brazil (Labrea, Rio Purús, 1; Lago do Baptista, Amazonas, 1; Piquiatuba, Pará, 2).

[1] Study of an adequate series of this rare eagle shows beyond doubt that *M. taeniatus* is not a taxonomic entity, but merely a stage—either the fully adult bird or a melanistic variety—of the widely spread *M. guianensis*. The black-backed form with blackish brown throat and chest and heavily black-barred posterior under parts and under wing coverts (*taeniatus*) is not confined to any particular area, but springs up here and there throughout the range of *guianensis*. It was first described by Pelzeln (Journ. Orn., 8, p. 337, 1860) from a Guianan specimen, which is even more deeply colored than Gurney's type, having the top and sides of the head—except for some brownish edges on crest and lateral neck feathers—very nearly as blackish (instead of hair brown) as the back, and the light bars on breast, abdomen, and crissum tinged with ochraceous-buff.

An adult female from the Mazaruni River closely approaches the type of *M. taeniatus* on the under parts, and merely differs by having the throat more variegated with whitish, the chest not so solidly nor so deeply blackish brown, and the blackish bars on breast and belly more broken up into spots, thus less regular; but on the upper surface it is in a less advanced stage and can be matched by various individuals, notably one from the Takutu River, which exhibit more or less distinct signs of immaturity. The occurrence of the *taeniatus* type in the heart of the range of *guianensis* and its reappearance in eastern Panama (at Permé) disposes of this variation as having any geographical significance. Furthermore,

Genus HARPIA Vieillot

Harpia Vieillot, Anal. Nouv. Orn. Élém., p. 24, April, 1816—type, by monotypy, "Aigle destructeur" Buffon=*Vultur harpyja* Linnaeus.

Harpyia Cuvier, Règne Anim., **1**, "1817," p. 317, pub. Dec. 7, 1816—same type.

Thrasaëtos (Gray MS.) Bonaparte, Proc. Zool. Soc. Lond., **5**, "1837," p. 108, pub. June 14, 1838—type, by monotypy, *Vultur harpyja* Linnaeus.

Nothrophontes Gloger, Gemein. Hand- und Hilfsbuch, livr. 3, p. 219, 1841—type, by monotypy, *Falco destructor* Daudin=*Vultur harpyja* Linnaeus.

Anopaia Haldeman, Proc. Acad. Nat. Sci. Phila., **1**, Nos. 15–16, June–July, p. 188, 1842—new name for *Harpyia* Cuvier.

Thrasyaëtus Agassiz, Nomencl. Zool. Ind. Univ., p. 369, 1846 (emendation).

*Harpia harpyja (Linnaeus). HARPY EAGLE.

Vultur harpyja Linnaeus, Syst. Nat., 10th ed., **1**, p. 86, 1758—based on "Yzquauhtli" Hernandez, Hist. Nov. Hisp., p. 34, Mexico.

Vultur coronatus Jacquin, Beytr. Gesch. Vögel, p. 15, 1784—mountains near the Magdalena River, Colombia.

Falco harpyja Gmelin, Syst. Nat., **1**, (1), p. 251, 1788—Mexico and South America.

Falco jacquini Gmelin, Syst. Nat., **1**, (1), p. 251, 1788—new name for *Vultur coronatus* Jacquin.

Falco cristatus Gmelin, Syst. Nat., **1**, (1), p. 260, 1788—based on "Crested Falcon" Dillon, Trav. through Spain, p. 80, pl. 3 (live bird kept in the menagerie at Madrid).

Falco destructor Daudin, Traité Élém. d'Orn., **2**, p. 60, 1801—based on "Grand Aigle de la Guiane" Mauduyt, Enc. Méth., Hist. Nat. Ois., **1**, p. 475, Guiana; Temminck, Nouv. Rec. Pl. Col., livr. 3, pl. 14, 1820; Schomburgk, Reisen Brit. Guiana, **2**, p. 365, 1848—above Aripai, Rupununi River; Burlamaque, Rev. Braz., **1**, p. 37, 1858 (habits).

Falco imperialis Shaw, Gen. Zool., **7**, (1), p. 52, pl. 15, 1809—Guiana.

a specimen from Sarayacu (type locality of *M. taeniatus*) in juvenile plumage (above white, finely vermiculated with smoke gray on crown and nape, more densely so with dusky and washed with pale gray on interscapulars and upper tail coverts; wing coverts, scapulars, and inner secondaries light mouse gray, barred and vermiculated with dusky, the tips of the greater series nearly white; tail feathers gray with about fifteen black cross-bands; underneath entirely white) is nowise different from others of corresponding age from Amazonia and Santa Catharina. An adult bird from the last-named Brazilian state (Joinville), furthermore, connects the ordinary type of *guianensis* with the so-called *taeniatus*, being just halfway between the two.

Additional material examined.—Honduras: San Pedro Sula, 1 (female, Jan. 15, 1890. E. Wittkugel).—Panama: Lion Hill, 1.—Colombia: Remedios, 1.—Ecuador: Sarayacu, 2.—British Guiana: Bartica Grove, 1; Mazaruni River, 1; River Takutu, 1; unspecified, 2.—Brazil: Manáos, 1; Lago do Manaqueri, Rio Solimões, 1; Borba, Rio Madeira, 1; "Upper Amazon," 1; vicinity of Rio de Janeiro, 1; Joinville, Santa Catharina, 4.—Bolivia: Buena Vista, Santa Cruz, 1.

Falco regalis Shaw, Gen. Zool., **7**, (1), p. 56, 1809—based on "L'Ouira Ouassou" Sonnini, in Buffon, Hist. Nat. Gén. et Part., **38**, p. 47, pl. 7, fig. 1 (based on a manuscript sent to Condamine from Pará, Brazil).[1]

Falco caracca Shaw, Gen. Zool., **7**, (1), p. 64, 1809—based on "Crested Falcon" Dillon, Trav. through Spain, p. 80, pl. 3.

Harpyia destructor Cuvier, Règne Anim., **1**, p. 317, "1817" [=Dec. 7, 1816]; d'Orbigny, Voy. Amér. Mérid., Ois., p. 81, 1835—Bolivia (Yuracares, Santa Cruz de la Sierra); Hallowell, Proc. Acad. Nat. Sci. Phila., **3**, p. 84, 1846 (anatomy); Burmeister, Syst. Uebers. Th. Bras., **2**, p. 59, 1855—Caracas, Venezuela; Lawrence, Ann. Lyc. Nat. Hist. N. Y., **9**, p. 145, 1868—San José, Costa Rica.

Harpyia maxima Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **14**, p. 233, 1817—(new name for *Vultur harpyja* Linnaeus).

Harpyia ferox Lesson, Traité d'Orn., livr. 1, p. 50, pls. 10, 11, fig. 1, Feb., 1830 (new name for *Falco destructor* Daudin, etc.).

Thrasaëtos(us) harpyia Bonaparte, Proc. Zool. Soc. Lond., **5**, "1837," p. 108, June 14, 1838—Mexico; Sclater and Salvin, Ibis, 1859, p. 215—Vera Paz, Guatemala; Lawrence, Ann. Lyc. Nat. Hist. N. Y., **7**, p. 461, 1862—Panama Railroad; Sclater and Salvin, Proc. Zool. Soc. Lond., 1864, p. 368—Panama Railroad; Frantzius, Journ. Orn., **17**, p. 368, 1869—Costa Rica (Cartago, Turrialba, San José); Sclater and Salvin, Proc. Zool. Soc. Lond., 1873, p. 302—above Nauta, Peru; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 224, 1874 (monog.); Lawrence, Bull. U. S. Nat. Mus., **4**, p. 39, 1876—Almoloya, Tehuantepec, Mexico; Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, No. 2, p. 145, 1876—Mexico (Mirador, Tehuantepec) to Bolivia, Paraguay, and British Guiana (monog.); Boucard, Proc. Zool. Soc. Lond., 1878, p. 44—Candelaria Mountains, Costa Rica; Gurney, Ibis, 1878, p. 86—Guiana (color variety); Sumichrast, La Naturaleza, **5**, p. 236, 1881—Mexico (Almoloya, Tacubaya, Orizaba, Guichilona, Tehuantepec); Taczanowski, Orn. Pér., **1**, p. 131, 1884—Cayenne and Peru (Nauta); Salvin, Ibis, 1886, p. 75—British Guiana; Cherrie, Auk, **9**, p. 328, 1892—San José, Costa Rica (ex Frantzius); Ihering, Rev. Mus. Paul., **3**, p. 357, 1899—São José do Rio Pardo, São Paulo; idem, l.c., **4**, p. 162, 1900—Cantagallo, Rio de Janeiro; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 89, 1901—Mexico to Paraguay; Bertoni, Anal. Cient. Parag., **1**, No. 1, p. 153, 1901—Argentina (Sierra de Misiones) and Paraguay (Yuty); Ihering, Cat. Faun. Braz., **1**, p. 94, 1907—São Paulo (São José do Rio Pardo and Caconde); Berlepsch, Nov. Zool., **15**, p. 291, 1908—Cayenne; Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 246, 1910—Orán, Salta, and Sierra de Misiones; Carriker, Ann. Carnegie Mus., **6**, p. 464, 1910—El Hogar, Costa Rica; Hellmayr, Nov. Zool., **14**, p. 412, 1910—Borba, Rio Madeira; idem, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **26**, No. 2, p. 96, 1912—Pará; Snethlage, Bol. Mus. Goeldi, **8**, p. 135, 1914—Peixe-Boi (E.F.B.), Rio Guamá, Rio Capim, and Rio Tapajóz, Brazil; Bertoni, Faun. Parag., p. 43, 1914—Paraguay; Chubb, Bds. Brit. Guiana, **1**, p. 254, 1916—Mazaruni River, Puruni River,

[1] *Falco calquin* Shaw (Gen. Zool., **7**, (1), p. 55, 1809—based on Molina's rather ambiguously described "Calquin") may also be referable to the Harpy Eagle, although this bird has never been found in Chile.

Berbice, Demerara, Essequibo, etc.; Swann, Syn. List Accip., p. 62, 1919 (chars.; range); Stone, Auk, **44**, p. 562, 1917—near Pará (nesting); idem, Proc. Acad. Nat. Sci. Phila., **80**, p. 154, 1928—northwest of Castanhal, Pará.

Morphnus Harpyia Tschudi, Arch. Naturg., **10**, (1), p. 265, 1844—Peru; idem, Unters. Faun. Peru., Orn., p. 96, 1846—wooded region of Peru (Hacienda de Maraynioc, etc.); Cabanis, in Schomburgk, Reisen Brit. Guiana, **3**, p. 738, "1848"—sources of the Essequibo River; Pelzeln, Verh. Zool. Bot. Ges. Wien, **12**, pp. 167, 190, 1862—Pará, Barra do Rio Negro, and Borba, Rio Madeira (soft parts); idem, Journ. Orn., **11**, pp. 121, 127, 1863 (plumages); idem, Orn. Bras., **1**, p. 4, 1868—Borba (Rio Madeira), Barra do Rio Negro, and Pará, Brazil; Reinhardt, Vidensk. Medd. Naturhist. Foren., 1870, p. 73—Fazenda Bebida (near Lagõa Santa) and Curvelo, Minas Geraes; Cabanis, Journ. Orn., **22**, p. 229, 1874—Cantagallo, Rio de Janeiro.

Harpia harpyja Swann, Syn. Accip., p. 104, 1922; idem, Monog. Bds. Prey, **1**, p. 482, col. pl., 1930 (monog.); Peters, Bds. World, **1**, p. 246, 1931 (range); idem, Bull. Mus. Comp. Zool., **71**, p. 309, 1931—Banana River, Almirante, Panama; Griscom, Bull. Amer. Mus. N. H., **64**, p. 158, 1932—Guatemala; idem, Bull. Mus. Comp. Zool., **78**, p. 301, 1935—Panama; Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 450, 1936—Argentina (bibliog.).

Harpia harpyia Dugand, Caldasia, **1**, No. 3, p. 57, 1941—Rio Meta and Rio Salaqui, Colombia; idem, Rev. Acad. Colomb. Cienc., Bogotá, **4**, p. 395, 1941—Colombia.

Range.—Mexico, from the Isthmus of Tehuantepec and state of Vera Cruz south through Central America to Panama, Venezuela, the Guianas, eastern Peru, and Bolivia to southern Brazil (São Paulo), northern Argentina, and Paraguay.

Field Museum Collection.—1: British Guiana (Georgetown, 1).

Genus OROAETUS Ridgway[1]

Oroaëtus Ridgway, Smiths. Misc. Coll., **72**, No. 4, p. 1, Dec. 6, 1920—type, by orig. desig., *Falco isidori* Des Murs.

*Oroaëtus isidori (Des Murs). ISIDOR'S CRESTED EAGLE.

Falco isidori Des Murs, Rev. Zool., **8**, p. 175 [bis], 1845—Santa Fé de Bogotá, Colombia (type in Paris Museum).

Aquila isidori Des Murs, Icon. Orn., livr. 1, pl. 1 (adult male), 1845—Santa Fé de Bogotá.

Spizaëtus isidori(i) Sclater, Proc. Zool. Soc. Lond., **23**, p. 134, 1855—Bogotá; idem and Salvin, l.c., 1879, p. 540—Antioquia, Colombia.

[1] *Oroaëtus* Ridgway: Nearest to *Spizaëtus*, but larger; occipital feathers shorter, subcuneate; wing-tip relatively longer; rectrices broader and more truncate at tip; tibial feathers longer and denser. Adults above black, below rufous streaked with black; young above pale brown mottled with dusky, underneath white.

Lophotriorchis isidorii(i) Sharpe, Cat. Bds. Brit. Mus., **1**, p. 256, 1874—Colombia (Bogotá); Allen, Bull. Amer. Mus. N. H., **13**, p. 130, 1900—Bonda, Colombia; Chapman, l.c., **36**, p. 248, 1917—Paramillo Trail (alt. 11,000 ft.), western Andes, Colombia; Chubb, Ibis, 1919, p. 283—Bolivia (Charuplaya), Ecuador (Baeza, Yanayacu), and Venezuela (Mérida) (plumages); Swann, Syn. List Accip., p. 69, 1919—Colombia; idem, Auk, **38**, p. 363, 1921—Mérida.

Oroaëtus isidori Swann, Syn. Accip., p. 115, 1922—Colombia and Venezuela to Bolivia (chars.); Todd and Carriker, Ann. Carnegie Mus., **14**, p. 157, 1922—Bonda and Las Nubes, Santa Marta region, Colombia; Chapman, Bull. Amer. Mus. N. H., **55**, p. 236, 1926—Baeza, Ecuador; Peters, Bds. World, **1**, p. 247, 1931 (range); Darlington, Bull. Mus. Comp. Zool., **71**, p. 368, 1931—Quebrada Mateo, near Rio Frio, Magdalena, Colombia; Swann, Monog. Bds. Prey, **2**, p. 89, 1933 (monog.); Dugand, Rev. Acad. Colomb. Cienc., Bogotá, **4**, p. 394, pl. 2, fig. 9, 1941—Colombia; Lehmann, Caldasia, **2**, 2 pls., p. 411, 1944 (plumages).

Range.—Andes of western Venezuela (Cordillera of Mérida) and Colombia (Bonda and Las Nubes, Santa Marta; near Rio Frio, Magdalena; Paramillo, western Andes; Bogotá) south through Ecuador (Yanayacu, Baeza) to Bolivia (Charuplaya, La Paz).[1]

Field Museum Collection.—2: Colombia (Carpenteria, El Tambo, Cauca, 1; unspecified, 1).

Genus SPIZASTUR G. R. Gray

Spizastur ("Lesson") G. R. Gray, List Gen. Bds., 2nd ed., p. 3, 1841—type, by orig. desig., "*S. atricapillus* (Cuv.) Less. Pl. col. 79"=*Falco atricapillus* Temminck (not of Wilson)=*Buteo melanoleucus* Vieillot.

Spiziaster ("Lesson") Kaup, Contr. Orn., 1850, p. 62 (emendation).

Spiziastur Sharpe, Cat. Bds. Brit. Mus., **1**, p. 258, 1874 (emendation).

*Spizastur melanoleucus (Vieillot). BLACK-AND-WHITE CRESTED EAGLE.

Buteo melanoleucus Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **4**, p. 482, 1816—"la Guyane" (type presumably in the Paris Museum);[2] idem and Oudart, Gal. Ois., **1**, (1), p. 40, pl. 14, 1822—"Guiane."

Falco atricapillus (not of Wilson, 1812) (Cuvier MS.) Temminck, Nouv. Rec. Pl. Col., livr. 14, pl. 79, Sept., 1821—Cayenne (type in Paris Museum).

Spizaëtus atricapillus Kaup, Isis, 1847, col. 168 (descr.); Burmeister, Syst. Uebers. Th. Bras., **2**, p. 65, 1855; Pelzeln, Verh. Zool. Bot. Ges. Wien,

[1] *Additional material examined.*—Venezuela, Cordillera of Mérida: Mérida, 1; Nevados, Páramos de la Sierra (alt. 3,000 meters), 1; Páramos de los Conejos (alt. 3,000 meters), 1.—Colombia: "Bogotá," 1; Cauca Valley, 1.—Ecuador: Baeza, 2.—Bolivia: Charuplaya, Dept. La Paz (alt. 1,350 meters), 1.

[2] It is, however, not listed by Pucheran (Rev. Mag. Zool., (2), **2**, pp. 81–94, 1850) among Vieillot's types.

12, pp. 163, 187, 1862—São Paulo (Ypanemá), Goyáz (Porto do Rio Araguay), Matto Grosso (Villa Maria), and Amazonas (Forte do Rio Branco), Brazil (soft parts); idem, Orn. Bras., **1**, p. 4, 1868—same localities.

Spizaëtus melanoleucus Bonaparte, Consp. Gen. Av., **1**, p. 28, 1850—South America; Sclater and Salvin, Ibis, 1859, p. 215—Guatemala; Schlegel, Mus. Pays-Bas, Astures, p. 14, 1862—Surinam and Costa Rica; Sclater and Salvin, Proc. Zool. Soc. Lond., 1864, p. 369—Panama Railroad; Lawrence, Ann. Lyc. Nat. Hist. N. Y., **9**, p. 132, 1868—La Palma, Costa Rica; Frantzius, Journ. Orn., **17**, p. 368, 1869—"Esparza" [=Esparta] and "Pacuar" [=Pacuare], Costa Rica; Lawrence, Bull. U. S. Nat. Mus., **4**, p. 38, 1876—Santa Efigenia, Tehuantepec, Mexico; Boucard, Proc. Zool. Soc. Lond., 1883, p. 456—Tizimin, Yucatan; Berlepsch and Ihering, Zeits. Ges. Orn., **2**, p. 170, 1885—Taquara, Rio Grande do Sul.

Spiziaëtus atriceps Kaup, Contr. Orn., 1850, p. 62—new name for *Falco atricapillus* Temminck and *Buteo melanoleucus* Vieillot.

Spiz(i)astur melanoleucus Sharpe, Cat. Bds. Brit. Mus., **1**, p. 258, 1874 (descr.); Cabanis, Journ. Orn., **22**, p. 229, 1874—Cantagallo, Rio de Janeiro; Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, No. 2, p. 166, 1876 (monog.); Sumichrast, La Naturaleza, **5**, p. 236, 1881—Santa Efigenia and Uvero, Mexico; Ferrari-Perez, Proc. U. S. Nat. Mus., **9**, p. 167, 1886—Jalapa, Vera Cruz, Mexico; Stone, Proc. Acad. Nat. Sci. Phila., 1890, p. 205—Tekanto and Sitilpetch, Yucatan (seen only); Allen, Bull. Amer. Mus. N. H., **5**, p. 147, 1893—Chapada, Matto Grosso; Ihering, Ann. Est. Rio Grande do Sul, **16**, p. 140, 1899—Mundo Novo and São Lourenço, Rio Grande do Sul; idem, Rev. Mus. Paul., **3**, p. 358, 1899—Piracicaba, São Paulo; idem, l.c., **4**, p. 163, 1900—Cantagallo, Rio de Janeiro; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 94, 1901—Mexico (Jalapa, Santa Efigenia, Uvero, Tizimin, etc.), Guatemala (Huamuchal, Savanna Grande), Nicaragua (Matagalpa), Costa Rica (Tucurríqui, La Palma, Esparta, Pacuare), Panama (Lion Hill), and South America; Ihering, Cat. Faun. Braz., **1**, p. 94, 1907—São Paulo and Santa Catharina (Colonia Hansa); Berlepsch, Nov. Zool., **15**, p. 291, 1908—Cayenne; Carriker, Ann. Carnegie Mus., **6**, p. 465, 1910—El Hogar and Buenos Aires de Térraba, Costa Rica; Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 247, 1910—Alto Paraná, Paraguay; Bertoni, Faun. Parag., p. 43, 1914—Paraguay; Chubb, Bds. Brit. Guiana, **1**, p. 258, 1916—Rupununi River; Ménégaux, Rev. Franç. d'Orn., **10**, p. 289, 1918—Villa Lutetia, Misiones; Swann, Syn. List Accip., p. 70, 1919 (chars.; range); idem, Syn. Accip., p. 116, 1922 (chars.; range); Dabbene, El Hornero, **3**, p. 394, 1926—Concepción, Tucumán; Naumburg, Bull. Amer. Mus. N. H., **60**, p. 110, 1930—Matto Grosso (Villa Maria, Chapada); Peters, Bull. Mus. Comp. Zool., **71**, p. 309, 1931—Banana River, Almirante, Panama; idem, Bds. World, **1**, p. 247, 1931 (range); Griscom, Bull. Amer. Mus. N. H., **64**, p. 159, 1932—Guatemala; Swann, Monog. Bds. Prey, **2**, p. 94, 1933 (monog.); Griscom, Bull. Mus. Comp. Zool., **78**, p. 301, 1935—Panama; Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 451, 1936 (range).

Range.—Mexico from Oaxaca (Santa Efigenia) and Vera Cruz (Jalapa, Uvero) south through Central America to Panama (various

scattered records); also occurring in British Guiana (Rio Rupununi), Surinam, French Guiana (Cayenne), Brazil (Rio Branco; Pará; Goyáz; Matto Grosso; Rio de Janeiro; São Paulo; Santa Catharina; Rio Grande do Sul), northern Argentina (Concepción, Tucumán; Villa Lutetia, Misiones), and Paraguay (Alto Paraná).[1]

Field Museum Collection.—3: Nicaragua (San Emilio, Rivas, 1); Brazil (Serra da Lua, Amazonas, 1; Boca Ituqui, Pará, 1).

Genus SPIZAETUS Vieillot

Spizaëtus Vieillot, Anal. Nouv. Orn. Élém., p. 24, April, 1816—type, by subs. desig. (Gray, List Gen. Bds., p. 2, 1840), "L'Autour huppé" Levaillant=*Falco ornatus* Daudin.

Plumipeda Fleming, Phil. Zool., **2**, p. 234, 1822—type, by monotypy, *Falco superbus* Shaw=*Falco ornatus* Daudin.

Pternura Kaup, Mus. Senckenb., **3**, p. 259, 1845—type, by monotypy, *Falco tyrannus* Wied.

Spiziaëtus Kaup, Contr. Orn., 1850, pp. 61, 62—emendation of *Spizaëtus* Vieillot.

*Spizaëtus tyrannus (Wied).[2] TYRANT HAWK-EAGLE.

Falco tyrannus Wied, Reise Bras., **1**, p. 360 (8vo ed., p. 357), 1820—Ilha do Chave, below Quartel dos Arcos, Rio Belmonte, Bahia, Brazil (type in Wied Collection, now in the American Museum of Natural History, New York; cf. Allen, Bull. Amer. Mus. N. H., **2**, p. 267, 1889); Temminck, Nouv. Rec. Pl. Col., livr. 13, pl. 73, Aug., 1821—Brazil; Wied, Beitr. Naturg. Bras., **3**, (1), p. 84, 1830—Rio Belmonte.

Harpyia braccata Spix, Av. Spec. Nov. Bras., **1**, p. 7, pl. 3, 1824—"in St. Paolo" =São Paulo, Brazil (type lost, formerly in Munich Museum; cf. Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **22**, No. 3, p. 569, 1906); Des Murs, Rev. Zool., **10**, pp. 315, 323, 1847—"Côte ferme"=Venezuela (crit.).

[1] *Additional material examined.*—Guatemala: Savanna Grande, 1.—Honduras: Chamelicon, 1.—Nicaragua: Matagalpa, 2.—Panama: Veraguas, 1.—British Guiana: Rupununi River, 1.—Brazil: Forte do São Joaquim, Rio Branco, 1; Rio Araguay, Goyáz, 1; Villa Maria, Matto Grosso, 1; Blumenau, Santa Catharina, 1.

[2] *Spizaëtus tyrannus* (Wied), though regarded by Schlegel (Mus. Pays-Bas, Astures, p. 2, 1862) and Swann (Syn. Accip., p. 117, 1922) as a melanistic "phase" of *S. ornatus*, is quite distinct specifically, as has been pointed out by Stresemann (Journ. Orn., 72, pp. 429–430, 1924). With a large series available for study, we find it to differ conspicuously by larger size, proportionately much longer tail, much shorter tarsus, lack of the rufous color on hind neck, sides of neck and chest in the adult, and the very characteristic juvenile plumage, which has only some white on the throat.

Additional material examined.—Brazil: Manáos, 1; Furo do Japim, Santarém, 1; Ypanemá, São Paulo, 1; Mattodentro, São Paulo, 1; Joinville, Santa Catharina, 14; unspecified, 1.

[*Spizaëtus*] *spixii* Des Murs, Rev. Zool., **10**, p. 325, 1847 (new name for *Harpyia braccata* Spix).

Spizaëtus tyrannus Cassin, Proc. Acad. Nat. Sci. Phila., **4**, p. 87, 1848—near Perote, Vera Cruz; Lafresnaye, Rev. Zool., **11**, p. 134, 1848 (crit.); Kaup, Contr. Orn., 1850, p. 63 (crit.); Sclater, Proc. Zool. Soc. Lond., **23**, p. 134, 1855—Bogotá; Burmeister, Syst. Uebers. Th. Bras., **2**, p. 62, 1855—Rio de Janeiro (Nova Friburgo) and Minas Geraes (between Sabará and Santa Luzia); Sclater and Salvin, Ibis, 1859, p. 215—Guatemala; Sclater, Proc. Zool. Soc. Lond., **28**, p. 253, 1860—vicinity of Orizaba, Mexico; Pelzeln, Verh. Zool. Bot. Ges. Wien, **12**, pp. 167, 189, 1862—São Paulo (Ypanemá), Barra do Rio Negro [=Manáos], Rio Madeira (Borba) (soft parts); Lawrence, Ann. Lyc. Nat. Hist. N. Y., **7**, p. 316, 1862—Atlantic slope of the Isthmus of Panama; Sclater and Salvin, Proc. Zool. Soc. Lond., 1864, p. 368—Panama Railroad; iidem, l.c., 1867, p. 590—Rio Capim, Pará; Lawrence, Ann. Lyc. Nat. Hist. N. Y., **9**, p. 132, 1868—Costa Rica [=Tucurríqui]; Pelzeln, Orn. Bras., **1**, p. 4, 1868—São Paulo (Mattodentro, Ypanemá) and Amazonia (Borba, Rio Madeira; Barra do Rio Negro; Furo do Japim [near Santarém]); Frantzius, Journ. Orn., **17**, p. 368, 1869—Costa Rica; Salvin, Proc. Zool. Soc. Lond., 1870, p. 215—Calóbre, Veraguas; Sclater and Salvin, l.c., 1870, p. 838—[San Pedro], Honduras; iidem, l.c., 1873, p. 302—near Santa Cruz, Peru; Layard, Ibis, 1873, p. 394—Pará; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 264, 1874—Bogotá, Guatemala (Choctum), Rio Capim, and Demerara; Sumichrast, La Naturaleza, **5**, p. 236, 1881—Mirador and Potrero, Vera Cruz, Mexico; Taczanowski, Orn. Pér., **1**, p. 134, 1884—Peru (Santa Cruz, Rio Huallaga) and French Guiana; Berlepsch and Ihering, Zeits. Ges. Orn., **2**, p. 169, 1885—Taquara, Rio Grande do Sul; Ihering, Ann. Est. Rio Grande do Sul, **16**, p. 140, 1899—Mundo Novo; idem, Rev. Mus. Paul., **3**, p. 360, 1899—São Paulo; idem, l.c., **4**, p. 163, 1900—Cantagallo and Nova Friburgo, Rio de Janeiro; Bangs, Proc. New Eng. Zool. Cl., **2**, p. 15, 1900—Loma del León, Panama; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 93, 1901—Mexico (Mirador, Potrero), Guatemala (Choctum, Savanna Grande, Dueñas), Honduras (Potrerillos, San Pedro), Salvador (Volcan de San Miguel), Nicaragua (Mombacho), Costa Rica, and Panama; Ihering, Cat. Faun. Braz., **1**, p. 95, 1907—São Paulo (Ubatuba), Minas Geraes (Vargem Alegre), and Rio de Janeiro (Ilha Grande); Berlepsch, Nov. Zool., **15**, p. 291, 1908—Cayenne; Carriker, Ann. Carnegie Mus., **6**, p. 466, 1910—Juan Viñas and Boruca, Costa Rica; Hellmayr, Nov. Zool., **14**, p. 412, 1910—Borba, Rio Madeira; idem, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **26**, No. 2, p. 96, 1912—Pará; Snethlage, Bol. Mus. Goeldi, **8**, p. 136, 1914—Pará, Marajó (Magoary), and Rio Jamauchim, Brazil; Chubb, Bds. Brit. Guiana, **1**, p. 260, 1916—Mazaruni River; Dabbene, Bol. Soc. Physis, **2**, p. 428, 1916—Santa Ana and Bonpland, Misiones; Chapman, Bull. Amer. Mus. N. H., **36**, p. 248, 1917—Puerto Valdivia, Colombia; Stone, Proc. Acad. Nat. Sci. Phila., **70**, p. 250, 1918—Gatún, Panama; Bangs and Penard, Bull. Mus. Comp. Zool., **62**, p. 37, 1918—vicinity of Paramaribo, Surinam; Swann, Syn. List Accip., p. 71, 1919 (chars.; range); Todd and Carriker, Ann. Carnegie Mus., **14**, p. 157, 1922—Bonda, Santa Marta, Colombia; Stresemann, Journ. Orn., **72**, p. 429, 1924—Jalapa, Mexico, and Pará, Brazil (crit.; chars.); Dabbene, El

Hornero, 3, p. 394, 1926—Santa Ana, Misiones; Peters, Bull. Mus. Comp. Zool., 71, p. 309, 1931—Changuinola and Fruitdale, Almirante, Panama; idem, Bds. World, 1, p. 248, 1931 (range); Griscom, Bull. Amer. Mus. N. H., 64, p. 159, 1932—Guatemala; Swann, Monog. Bds. Prey, 2, p. 101, 1933 (monog.); Griscom, Bull. Mus. Comp. Zool., 78, p. 301, 1935—Panama; Steullet and Deautier, Obr. Cinc. Mus. La Plata, 1, p. 453, 1936 (range); Traylor, Field Mus. Nat. Hist., Zool. Ser., 24, p. 203, 1941—Pacaitun, Campeche, Mexico; Dugand, Rev. Acad. Colomb. Cienc., Bogotá, 4, p. 395, 1941—Colombia.

Spizaëtus braccata Léotaud, Ois. Trinidad, p. 12, 1866—Trinidad.

Range.—Southeastern Mexico (State of Vera Cruz), south through Central America, Colombia, Venezuela, the Guianas, eastern Peru, and the whole of Brazil to Rio Grande do Sul, eastern Bolivia (Santa Cruz) and northeastern Argentina (Misiones); Island of Trinidad.

Field Museum Collection.—19: Mexico (Pacaitun, Campeche, 1); British Honduras (Stann Creek, Middlesex, 1); Costa Rica (Juan Vinas, Cartago, 1); Panama (Rio Santa Maria, Veragua, 1; Port Obaldia, Darien, 1); Colombia (Rio Salaqui, Choco, 1; Cucuta, Santander, 1); Ecuador, Oriente (Rio Capataza, 1; Anosús, 1); Brazil (Canutama, Rio Purús, 2; João Pessõa, Amazonas, 1; Itacoatiara, Rio Amazonas, 2; Igarape Aniba, Amazonas, 1; Lago Baptista, Amazonas, 1; Piquiatuba, Pará, 1; Joinville, Santa Catharina, 1); Bolivia (Rio Surutú, Santa Cruz, 1).

***Spizaëtus ornatus ornatus** (Daudin). MAUDUYT'S HAWK-EAGLE.

Falco ornatus Daudin, Traité Élém. d'Orn., 2, p. 77, 1801—based on "L'Autour huppé" Levaillant (Hist. Nat. Ois. Afr., 1, p. 114, pl. 26) and "L'Aigle Moyen de la Guiane" Mauduyt (Enc. Méth., Hist. Nat. Ois., 1, p. 475), Cayenne; Wied, Beitr. Naturg. Bras., 3, (1), p. 78, 1830—Rio Belmonte, Bahia, Brazil.

Falco superbus Shaw, Gen. Zool., 7, (1), p. 64, 1809—based on "L'Aigle Moyen de la Guiane" Mauduyt, Enc. Méth., Hist. Nat. Ois., 1, p. 475, "Guiana"=Cayenne.

Aquila urutaurana Dumont, Dict. Sci. Nat., 1, p. 358, 1816—based on "Urutauana" Marcgrave, Hist. Nat. Bras., p. 203, fig. 204, northeastern Brazil.

Harpyia ornata Spix, Av. Spec. Nov. Bras., 1, p. 8, 1824—"ad flumen Amazonum."

Spizaëtus ornatus Jardine, Ann. Mag. Nat. Hist., 18, p. 117, 1846—Tobago; Burmeister, Syst. Uebers. Th. Bras., 2, p. 64, 1855—Brazil; Pelzeln, Verh. Zool. Bot. Ges. Wien, 12, pp. 166, 188, 1862—Borba (Rio Madeira), Ypanemá (São Paulo), Forte do Rio Branco, Lago do Manaqueri (Rio Solimões), and Villa do Tapajóz [=Santarem], Brazil (soft parts); idem, Orn. Bras., 1, p. 4, 1868—same localities; Léotaud, Ois. Trinidad, p. 10,

1866—Trinidad; Sclater and Salvin, Proc. Zool. Soc. Lond., 1867, p. 753—Chyavetas, Peru; iidem, l.c., 1868, p. 629—San Esteban, Venezuela; Finsch, l.c., 1870, p. 555—Trinidad; Reinhardt, Vidensk. Medd. Naturhist. Foren., 1870, p. 72—near Lagõa Santa, Minas Geraes; Sclater and Salvin, Proc. Zool. Soc. Lond., 1873, p. 302—Chyavetas, Peru; Berlepsch, Journ. Orn., **21**, p. 289, 1873—Blumenau, Santa Catharina; Doering, Period. Zool. Arg., **1**, p. 246, 1874—Rio Guayquiraro, Corrientes; Taczanowski, Orn. Pér., **1**, p. 135, 1884—part, Chyavetas; Berlepsch and Ihering, Zeits. Ges. Orn., **2**, p. 169, 1885—Linha Pirajá, Rio Grande do Sul; Salvin, Ibis, 1886, p. 75—Bartica Grove, British Guiana; Berlepsch and Hartert, Nov. Zool., **9**, p. 114, 1902—Nericagua, Rio Orinoco, Venezuela; Ihering, Cat. Faun. Braz., **1**, p. 95, 1907—São Paulo (Iguapé) and Santa Catharina (Colonia Hansa); Berlepsch, Nov. Zool., **15**, p. 291, 1908—Cayenne; Hellmayr, l.c., **17**, p. 412, 1910—Borba, Rio Madeira; Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 247, 1910—Chaco Boreal and Misiones; Bertoni, Faun. Parag., p. 43, 1914—Alto Paraná, Paraguay; Snethlage, Bol. Mus. Goeldi, **8**, p. 136, 1914 (listed); Chubb, Bds. Brit. Guiana, **1**, p. 259, 1916—Berbice River and Bartica; Cherrie, Sci. Bull., Mus. Brookl. Inst., **2**, p. 345, 1916—Nericagua, Rio Orinoco; Chapman, Bull. Amer. Mus. N. H., **36**, p. 248, 1917—part, La Morelia, Colombia; Swann, Syn. List Accip., p. 70, 1919 (in part); Stresemann, Journ. Orn., **72**, p. 429, 1924—part, Pará, Bahia, and Santa Catharina (crit.); Dabbene, El Hornero, **3**, p. 394, 1926—Concepción, Tucumán; Sztolcman, Ann. Zool. Mus. Pol. Hist. Nat., **5**, p. 123, 1926—Barra do Rio Bom, Paraná; Naumburg, Bull. Amer. Mus. N. H., **60**, p. 110, 1930—Matto Grosso; Peters, Bds. World, **1**, p. 248, 1931 (range in part); Berlioz, Bull. Mus. Hist. Nat. Paris, (2), **4**, p. 237, 1932—Sarayacu, Ecuador; Swann, Monog. Bds. Prey, **2**, p. 98, 1933 (in part); Belcher and Smooker, Ibis, 1934, p. 593—Trinidad; Pinto, Rev. Mus. Paul., **20**, p. 52, 1936—Fazenda Formiga, Rio das Almas, Goyáz; Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 452, 1936—Monte Carlo, Misiones; Lehmann, Caldasia, **2**, 2 pls., p. 413, 1944 (plumages).

Spizaëtus mauduyti (not *Falco mauduyti* Daudin)[1] Sharpe, Cat. Bds. Brit. Mus., **1**, p. 262, 1874—part, spec. a, b, e, Brazil, Bahia; Riker and Chapman, Auk, **8**, p. 161, 1891—Santarém, Brazil; Allen, Bull. Amer. Mus. N. H., **5**, p. 147, 1893—Chapada, Matto Grosso; Cory, Auk, **10**, p. 220, 1893—Tobago; Ihering, Ann. Est. Rio Grande do Sul, **16**, p. 140, 1899—Mundo Novo; idem, Rev. Mus. Paul., **3**, p. 359, 1899—Iguapé, São Paulo.

Spizaëtus apirati Bertoni, Anal. Cient. Parag., **1**, No. 1, p. 154, Jan., 1901—Alto Paraná, Paraguay (type in coll. of A. de W. Bertoni).

Spizaëtus ornatus ornatus Gyldenstolpe, K. Svensk. Vetensk. Akad. Handl., (3), **23**, p. 53, 1945—Bolivia (Victoria and Bresta, El Beni).

[1] *Falco mauduyti* Daudin (Traité Élém. d'Orn., **2**, p. 73, 1801—based on the ambiguously described "Grand Autour de Cayenne" Mauduyt, Enc. Méth., Hist. Nat. Ois., **1**, p. 500) appears to be unidentifiable. Vieillot (Nouv. Dict. Hist. Nat., nouv. éd., **10**, p. 341, 1817) proposed the name *Sparvius nigricans* for the larger of the two birds described by Mauduyt, which the latter author believed to be the female of his "Grand Autour de Cayenne."

Range.—Eastern South America, from the eastern base of the east Colombian Andes (La Morelia) east through Venezuela, Trinidad, and Tobago to the Guianas and south through Brazil, eastern Ecuador (Sarayacu), and eastern Peru (near Santa Cruz, Rio Huallaga) to Rio Grande do Sul, Paraguay, eastern Bolivia (Santa Cruz) and northern Argentina (Concepción, Tucumán; Misiones).[1]

Field Museum Collection.—7: Brazil (Itacoatiara, Rio Amazonas, 1; Lago do Baptista, Amazonas, 1; Piquiatuba, Pará, 2; Caxiricatuba, Rio Tapajoz, 1; Obidos, Pará, 1); Bolivia (Buena Vista, Santa Cruz, 1).

***Spizaëtus ornatus vicarius** Friedmann.[2] FRIEDMANN'S HAWK-EAGLE.

Spizaëtus ornatus vicarius Friedmann, Journ. Wash. Acad. Sci., **25**, No. 10, p. 451, Oct. 15, 1935—near "Manatol" [=Manatee] Lagoon, British Honduras (type in Carnegie Museum); Traylor, Field Mus. Nat. Hist., Zool. Ser., **24**, p. 203, 1941—Campeche (Pacaitun), Yucatan (Tizimin).

Spizaëtus ornatus (not *Falco ornatus* Daudin) Sclater, Proc. Zool. Soc. Lond., **25**, p. 201, 1857—Jalapa, Mexico; Moore, l.c., **27**, p. 52, 1859—Puerto Caballos, near Omoa, Honduras; Sclater, l.c., p. 389, 1859—Teotalcingo, Oaxaca; Sclater and Salvin, Ibis, 1859, p. 215—Cahabón, Guatemala; Taylor, Ibis, 1860, p. 223—between Potrerillos and San Pedro, Honduras; Sclater and Salvin, Proc. Zool. Soc. Lond., 1864, p. 369—Panama Railroad; Salvin, l.c., 1867, p. 158—Cordillera de Tolé, Veraguas; Lawrence, Ann. Lyc. Nat. Hist. N. Y., **9**, p. 132, 1868—Costa Rica (San José, La Palma, Juan); Frantzius, Journ. Orn., **17**, p. 367, 1869—Orósi and La Palma, Costa Rica; Salvin, Proc. Zool. Soc. Lond., 1870, p. 215—Calovévora, Veraguas; Sclater and Salvin, l.c., 1879, p. 540—Remedios, Colombia; Nutting, Proc. U. S. Nat. Mus., **5**, p. 404, 1882—La Palma, Gulf of Nicoya, Costa Rica; idem, l.c., **6**, p. 408, 1884—Los Sábalos, Nicaragua; Taczanowski, Orn. Pér., **1**, p. 135, 1884—part, Lechugal, Peru; Ferrari-Perez, Proc. U. S. Nat. Mus., **9**, p. 167, 1887—Actopam and Barra de Santa Ana, Vera Cruz, Mexico; Zeledón, Anal. Mus. Nac. Costa Rica, **1**, p. 126, 1887—San José, Costa Rica; Cherrie, Auk, **9**, p. 328, 1892—San José, Costa Rica; idem, Anal. Inst. Fís.-Geog. Mus. Nac. Costa Rica, **4**, p. 145, 1893—Boruca, Costa Rica; Underwood, Ibis, 1896, p. 446—

[1] *Additional material examined.*—Guiana: Cayenne, 1; Bartica Grove, 1.—Tobago: 1.—Venezuela: Nericagua, Rio Orinoco, 1.—Brazil: Forte do São Joaquim, Rio Branco, 1; Santarém, 1; Manaqueri, Rio Solimões, 1; Borba, Rio Madeira, 1; Ypanemá, São Paulo, 2; Joinville, Santa Catharina, 7; unspecified, 3.—Ecuador: Sarayacu, 1.

[2] *Spizaëtus ornatus vicarius* Friedmann: Similar to the nominate race, but with the sides of the head, nuchal collar, and sides of neck and chest duller rufous, snuff brown to Mikado brown rather than cinnamon rufous to hazel. The other characters claimed for this form prove to be of no consequence.

Sixteen specimens from Central America, one from Colombia (Remedios), and one from western Ecuador examined.

Miravalles, Costa Rica; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 92, 1901—part, Mexico, British Honduras (Belize), Guatemala (Coban, Cahabón, Choctum, Costa Grande), Honduras (Puerto Caballo), Nicaragua (Los Sábalos, San Emilio), Costa Rica, Panama, and Colombia; Dearborn, Field Mus. Nat. Hist., Orn. Ser., **1**, p. 83, 1907—Patulul, Guatemala; Carriker, Ann. Carnegie Mus., **6**, p. 465, 1910—Guanacaste and El Pózo de Térraba, Costa Rica; Chapman, Bull. Amer. Mus. N. H., **36**, p. 248, 1917—part, Atrato River and Puerto Valdivia, Colombia; Swann, Syn. List Accip., p. 70, 1919—part, Central America; Todd and Carriker, Ann. Carnegie Mus., **14**, p. 157, 1922—Bonda, Santa Marta, Colombia; Lönnberg and Rendahl, Ark. Zool., **14**, No. 25, p. 42, 1922—near Gualea, Ecuador; Stresemann, Journ. Orn., **72**, p. 429, 1924—part, Mexico, Costa Rica, and Panama; Chapman, Bull. Amer. Mus. N. H., **55**, p. 236, 1926—Ecuador; Peters, Bds. World, **1**, p. 248, 1931—part, Central America to Ecuador; Griscom, Bull. Amer. Mus. N. H., **64**, p. 159, 1932—Guatemala; Swann, Monog. Bds. Prey, **2**, p. 98, 1933 (in part); Griscom, Bull. Mus. Comp. Zool., **78**, p. 301, 1935—Panama; Van Tyne, Misc. Pub., Mus. Zool. Univ. Mich., **27**, p. 16, 1935—Uaxactun, Petén, Guatemala; Dugand, Rev. Acad. Colomb. Cienc., Bogotá, **4**, p. 395, pl. 1, fig. 1, pl. 2, fig. 10, 1941—Colombia.

Spizaëtus tyrannus (not *Falco tyrannus* Wied) Sclater, Proc. Zool. Soc. Lond., **26**, p. 357, 1858—near Potrerillos, Atlantic side, Honduras.

Spizaëtus mauduyti (not *Falco mauduyti* Daudin) Sharpe, Cat. Bds. Brit. Mus., **1**, p. 262, 1874—part, spec. c, d, Panama and Guatemala (Coban); Lawrence, Bull. U. S. Nat. Mus., **4**, p. 38, 1876—Santa Efigenia, Tehuantepec, Mexico; Sumichrast, La Naturaleza, **5**, p. 236, 1881—Cacoprieto, Oaxaca.

Range.—Southern Mexico from Oaxaca and Vera Cruz south through Central America to Colombia (west of the eastern Andes) and western Ecuador to the Peruvian boundary (Lechugal).

Field Museum Collection.—8: Mexico (Tutla, Oaxaca, 1; Pacaitun, Campeche, 1); Guatemala (Patulul, Solola, 1); Honduras (San Pedro, Colón, 1); Nicaragua (San Emilio, Rivas, 1); Colombia (Rio Jurado, Choco, 2; Ricaurte, Narino, 1).

*Spizaëtus devillei Dubois.[1] DEVILLE'S HAWK-EAGLE.

[1] *Spizaëtus devillei* Dubois was known only from two specimens in the Brussels Museum until Field Museum recently acquired a third. The description and figure of the bird that the describer took to be the adult, somewhat resembles the juvenile plumage of *S. ornatus* because of its white head and under parts. It differs, however, by lacking the broad black barring on the sides and tibial feathers (these markings being replaced by narrow shaft streaks) and by having only three (instead of five or six) black bands across the tail. The supposed young bird illustrated by Dubois (pl. 2) is remarkable for having the feathers of the under parts dark brown, bordered with white, and looks very different from any plumage of *S. ornatus* with which I am acquainted.

The dimensions which are given by the describer (wing, 470; tail, 320) are much larger, and even exceed those of *S. tyrannus*. I cannot help thinking that Dubois has misinterpreted the plumages, the white-bellied bird being in all prob-

Spizaëtus devillei Dubois, Bull. Acad. Roy. Sci., Lettr. et Beaux-Arts de Belg., (2), **38**, p. 129, pls. 1, 2, 1874—Baeza, eastern Ecuador (type in Brussels Museum); Chapman, Bull. Amer. Mus. N. H., **55**, p. 236, 1926—Baeza (ex Dubois); Peters, Bds. World, **1**, p. 248, 1931 (ex Dubois); Conover, Fieldiana, Zool., **31**, p. 44, 1946—Saloya, western Pichincha, Ecuador (disc. of third recorded specimen; translation of original description).

Range.—Eastern (Baeza) and western (Saloya) Ecuador.

Field Museum Collection.—1: Ecuador (Saloya, west Ecuador, 1).[1]

Genus AQUILA Brisson

Aquila Brisson, Orn., **1**, pp. 28, 419, 1760—type, by tautonymy, *Aquila* Brisson=*Falco chrysaetos* Linnaeus.

Euaquila Acloque, Faune de France, **1**, p. 99, 1900—type, by subs. desig. (Richmond, Proc. U. S. Nat. Mus., **53**, p. 589, 1917), *Falco chrysaetos* Linnaeus.

*Aquila chrysaetos canadensis (Linnaeus).[2] GOLDEN EAGLE.

Falco canadensis Linnaeus, Syst. Nat., 10th ed., **1**, p. 88, 1758—based on "The White-Tailed Eagle" Edwards, Nat. Hist. Bds., **1**, p. 1, pl. 1, Hudson's Bay (described from a live bird in the possession of Dr. R. M. Massey, at Stepney, London).

Aquila canadensis Duges, La Naturaleza, **1**, p. 138, 1870—Guanajuato, Mexico.

ability younger than the one with dusky-spotted under parts. I may also mention that in some young individuals of *S. ornatus* the black markings on the tibial feathers are much reduced in extent, but I have never seen an example without black bars on the flanks or with less than five black tail-bands.—C.E.H.

[1] This specimen is in the white-breasted plumage which Dubois considered that of the adult. It agrees very well in coloration with both his illustration (pl. 1) and the description except that the top of the head and back of the neck are much whiter than they are shown in the figure. Its dimensions also agree with those given by Dubois. It is a male and the wing measures 470, the tail 320, the tarsus 116 and the middle toe without claw 60 mm. While it superficially resembles the juvenile plumage of *S. ornatus*, it can be separated at a glance by its much larger size, by the lack of black barrings on the flanks and thighs, by the three instead of five black tail-bands and by its having the upper wing coverts and tertials edged with white.

Dr. Hellmayr's suggestion that this white-breasted plumage is that of the juvenile and not the adult is borne out by this example. In it some of the old worn white-edged feathers of the back have been replaced by new unworn ones, which are dark brown (almost black) without any white edges, thus agreeing in color with Dubois' illustration (pl. 2) and description of the supposed young example in the Brussels Museum.

The specimen was collected in western Ecuador at Saloya (el. 1,100 meters), on the Saloya River, on the southwest slope of the Pichincha volcano.—B.C.

[2] *Aquila chrysaetos canadensis* (Linnaeus), judging from the six American specimens available for comparison, seems to be separable from the European form by somewhat darker, more blackish brown coloration. I do not find, however, any appreciable difference in dimensions.

Aquila chrysaetus var. *canadensis* Baird, Brewer and Ridgway, Hist. N. Amer. Bds., 3, p. 314, 1874 (monog.).

Aquila chrysaetus(os) (not *Falco chrysaetos* Linnaeus) Sharpe, Cat. Bds. Brit. Mus., 1, p. 235, 1874—part, specs., Fort Simpson; Bendire, Life Hist. N. Amer. Bds., 1, p. 263, pl. 9, figs. 3, 5, 1892 (nesting habits); Salvin and Godman, Biol. Centr.-Amer., Aves, 3, p. 91, 1901—North America south to Durango (Ciudad Durango) and Guanajuato, Mexico; Grinnell, Univ. Calif. Pub. Zool., 32, p. 110, 1929—northern Lower California.

Aquila chrysaetos canadensis Swann, Syn. List Accip., p. 64, 1919 (chars.; range); idem, Syn. Accip., p. 109, 1922 (crit.); idem, Monog. Bds. Prey, 2, p. 30, 1932 (monog.); Peters, Bds. World, 1, p. 254, 1931 (range); Bent, Bull. U. S. Nat. Mus., 167, p. 293, 1937 (life hist.; distr.); Van Tyne and Sutton, Misc. Pub., Mus. Zool. Univ. Mich., 31, p. 23, 1937—Brewster County, Texas; Porsild, Canad. Field Nat., 57, p. 25, 1943—Mackenzie Delta (breeding); van Rossem, Occ. Pap., Mus. Zool. Louisiana State Univ., 21, p. 59, 1945—northern Sonora (resident).

Range.—Breeds from northern Alaska east to northern Ungava, south through mountainous regions to northern Lower California, northern Mexico, western Texas, and formerly to northern Florida, southern Texas and central Mexico (Guanajuato).

Field Museum Collection.—18: Alaska (Bethel, 2; Barrow, 1); British Columbia (Vancouver Island, 1); Alberta (Drumheller, 1; Rosebud, 1); California (San Diego County, 1); Arizona (Phoenix, 1); Wyoming (Custer, 1; Laramie, 1; Rocky Ford, 1); Nebraska (Stratton, 1); Arkansas (Madison County, 1); Minnesota (Roseau County, 1; Marshall County, 1); Illinois (Waukegan, 1; Cook County, 1); Connecticut (New Haven, 1).

Genus HALIAEETUS Savigny

Haliaeetus Savigny, Descr. de l'Egypte, Hist. Nat., 1, p. 68, 1809—type, by monotypy, *Haliaeetus nisus* Savigny=*Falco Albicilla* Linnaeus.

Thallasoaetus Kaup, Classif. Säug. Vögel, p. 123, 1844—type, by monotypy, *Aquila pelagica* Pallas.

*Haliaeetus leucocephalus leucocephalus (Linnaeus). SOUTHERN BALD EAGLE.

Falco leucocephalus Linnaeus, Syst. Nat., 12th ed., 1, p. 124, 1766—based on "The Bald Eagle" Catesby, Nat. Hist. Carolina, 1, p. 1, pl. 1, and "L'Aigle a tete blanche" Brisson, Orn., 1, p. 422, in America, Europa= South Carolina (ex Catesby).

Aquila pygargus Dumont, Dict. Sci. Nat., 1, p. 348, 1816—based largely on "L'Aigle a tete blanche" Daubenton, Pl. Enl., pl. 411, and "The Bald Eagle" Catesby, Nat. Hist. Carolina, 1, p. 1, pl. 1.

Haliaetus leucocephalus Baird, Brewer and Ridgway, Hist. N. Amer. Bds., **3**, p. 326, 1874 (monog.; in part); Sharpe, Cat. Bds. Brit. Mus., **1**, p. 304, 1874 (in part); Crandall, Zoologica, N. Y., **26**, p. 7, 1941 (plumage changes with age).

Haliaeetus leucocephalus leucocephalus Swann, Syn. List Accip., p. 90, 1920 (chars.; range); idem, Syn. Accip., p. 141, 1922 (range); Grinnell, Univ. Calif. Pub. Zool., **32**, p. 110, 1929—Lower California; Peters, Bds. World, **1**, p. 258, 1931 (range); Swann, Monog. Bds. Prey, **2**, p. 178, 1934 (monog.); Bent, Bull. U. S. Nat. Mus., **167**, p. 321, 1937 (life hist.; distr.).

Haliaeetus floridana H. B. Bailey, Bailey Mus. and Libr. Nat. Hist., Bull., No. 4, p. [2], "April 1" (=March 20), 1930—lower Florida Peninsula (type in coll. of H. B. Bailey).

Haliaeetus leucocephalus Bellrose, Auk, **61**, p. 467, 1944—Illinois (nesting records).

Range.—Southern half of the United States from Virginia west through the Gulf states to New Mexico, Arizona, southern California, and northern Lower California.[1]

Field Museum Collection.—10: California (San Clemente Island, 2; Monterey County, 1); Virginia (Princess Anne County, 1; Northampton County, 1); Georgia (Roswell, 1); Florida (Anclote, 3; Putnam County, 1).

*Haliaeetus leucocephalus washingtoniensis (Audubon).[2]

NORTHERN BALD EAGLE.

Falco washingtoniensis Audubon, Bds. Amer. (folio ed.), pl. 11, 1827.

Falco washingtoni Audubon, Orn. Biog., **1**, pp. 58, 62, 1831—near Henderson, Kentucky (the type specimen was presented by Audubon to his host Dr. Rankin and, if preserved at all, is doubtless unidentifiable).

Haliaetus leucocephalus (not *Falco leucocephalus* Linnaeus) Stejneger, Bull. U. S. Nat. Mus., **29**, p. 209, 1885—Bering Island (crit.; meas.).

Haliaetus leucocephalus alascanus Townsend, Proc. Biol. Soc. Wash., **11**, p. 145, June 9, 1897—Unalaska, Aleutian Islands (type in U. S. National Museum); Swann, Syn. List Accip., p. 91, 1920 (chars.; range); idem, Syn. Accip., p. 141, 1922 (range); idem, Monog. Bds. Prey, **2**, p. 180, 1934 (monog.); Bent, Bull. U. S. Nat. Mus., **167**, p. 333, 1937 (crit.; life hist.; distr.).

Haliaeetus leucocephalus washingtoniensis Peters, Bds. World, **1**, p. 258, 1931 (range).

[1] We have not been able to find any record from other parts of Mexico.

[2] *Haliaeetus leucocephalus washingtoniensis* (Audubon) differs from the nominate race merely by its larger size. It is very hard to draw the line between the two subspecies since the decrease in dimensions is rather gradual from north to south. From the material we have seen, it seems appropriate to restrict in the east the range of typical *leucocephalus* to the southern states. The earliest name for the larger form would then be *washingtoniensis*, as has been pointed out by Peters.

Haliaeetus leucocephalus alascanus Swarth, Pac. Coast Avifauna, **22**, p. 24, 1934—Kodiak, Sitkalidak and Akutan Islands, Alaska (nesting); Murie, Condor, **42**, p. 198, 1940—Aleutian Islands (economic status); Porsild, Canad. Field Nat., **57**, p. 26, 1943—Mackenzie Delta (breeding north to the tree limit).

Range.—Northwestern Alaska and northern Mackenzie to northern Ungava and south to British Columbia and the northern half of the United States.

Field Museum Collection.—26: Alaska (Boisdequadia, 1; unspecified, 1; Kodiak Island, 1); British Columbia (Vancouver Island, 10); Washington (Jefferson County, 1); North Dakota (Ramsey County, 1; Towner County, 1); Illinois (Cook County, 1; Deerfield, 1; West Brooklyn, 1; Joliet, 1); Indiana (Michigan City, 1); Nova Scotia (Dartmouth, 1; Halifax, 1); Connecticut (Willimantic, 1; Branford, 1; Lynn, 1).

***Haliaeetus albicilla** (Linnaeus). GRAY SEA EAGLE.

Falco Albicilla Linnaeus, Syst. Nat., 10th ed., **1**, p. 89, 1758—based principally on Fauna Svec., p. 57, terra typica, therefore, Sweden.

Haliaetos Groenlandicus Brehm, Handl. Naturg. Deuts., p. 16, 1831—Greenland (no type extant).

Haliaetus brooksi Hume, Ibis, (n.s.), **6**, No. 3, p. 438, July, 1870—based on *Haliaetus? pelagicus* (not *Aquila pelagica* Pallas) Hume, Rough Not. Ind. Col. Orn., Part 2, p. 253, 1870—between Mynpooree and Etwah, Upper India (type from Summan Jheel, Mainpuri District, in the British Museum, examined).

Haliaeetus albicilla Kumlien, Bull. U. S. Nat. Mus., **15**, p. 82, 1879—Cumberland Sound (American Harbor, Oct., 1877); Bishop, N. Amer. Fauna, **19**, p. 73, 1900—Unalaska (Oct. 5, 1899); Crandall, Auk, **32**, p. 368, 1915—off Nantucket Lightship, Massachusetts (Nov. 14, 1914); Swann, Syn. List Accip., p. 90, 1920 (range); Peters, Bds. World, **1**, p. 258, 1931 (range); Jourdain, in Bent, Bull. U. S. Nat. Mus., **167**, p. 315, 1937 (life hist.).

Haliaeetus albicilla brooksi Clark,[1] Proc. U. S. Nat. Mus., **38**, p. 57, 1910 (crit.); Oberholser, Auk, **36**, p. 82, 1919 (crit.).

Haliaeetus albicilla albicilla Swann, Syn. Accip., p. 140, 1922 (chars.; range); idem, Monog. Bds. Prey, **2**, p. 173, 1934 (monog.).

Haliaeetus albicilla groenlandicus Swann, Syn. Accip., p. 141, 1922—Greenland (crit.); Schioler, Danm. Fugle, **3**, p. 79, pls. 21–23, 1931—Greenland (monog.); Swann, Monog. Bds. Prey, **2**, p. 176, 1934 (monog.).

[1] There is hardly any doubt that *H. albicilla groenlandicus* Brehm is separable by its larger size, as demonstrated by Schioler with the help of a good series from Greenland. On the other hand, we have been unable to corroborate the lesser dimensions of birds from eastern Siberia and Japan, which gave rise to the resuscitation of an alleged smaller form *H. a. brooksi*. Of the specimens found on American soil the one from Unalaska is without question the typical race, while the bird seen by Kumlien in Cumberland Sound is more likely to have been *H. a. groenlandicus*.

Range.—Breeds in Greenland, Iceland, Europe, and northern Asia. Casual on the Aleutian Islands (Unalaska, Oct. 5, 1899) and in Cumberland Sound (American Harbor, October, 1877); accidental off the coast of Massachusetts (off Nantucket Lightship, Nov. 14, 1914).[1]

Field Museum Collection.—4: Alaska (Unalaska, 1); Greenland (Julianehaab, 2; Kangerlud, 1).

Haliaeetus pelagicus pelagicus (Pallas). STELLER'S SEA EAGLE.

Aquila pelagica Pallas, Zoogr. Rosso-Asi., **1**, p. 343, 1811—"in insulis inter Camtchatkam et Continentem Americes, praesertim in infami naufragio et morte *Beringii* insula,"[2] (type in coll. of P. Pallas).

Thalassoaetus pelagicus Clark, Proc. U. S. Nat. Mus., **38**, p. 57, 1910—Unalaska (May 26, 1906; sight record); Hanna, Auk, **37**, p. 250, 1920—St. Paul Island, Pribilof Islands (Dec. 15, 1917); Gilbert, Condor, **24**, p. 66, 1922—Kodiak Island, Alaska (Aug. 10, 1921); Preble and McAtee, N. Amer. Fauna, **46**, p. 82, 1923—St. Paul, Pribilof Islands.

Haliaeetus pelagicus Peters, Bds. World, **1**, p. 258, 1931 (range).

Thallassoaetus pelagicus pelagicus Swann, Monog. Bds. Prey, **2**, p. 181, 1934 (monog.).

Thallasoaetus pelagicus Bent, Bull. U. S. Nat. Mus., **167**, p. 349, 1937 (life hist.).

Range.—Breeds in northeastern Siberia, Kamchatka and Sakhalin Island. Casual on the Pribilof Islands (St. Paul, Dec. 15, 1917) and on Kodiak Island (Aug. 10, 1921);[3] winters in Korea, Japan and the Riukiu Islands.

Subfamily CIRCINAE. Harriers

Genus CIRCUS Lacépède

Circus Lacépède, Tabl. Méth. Ois., p. 4, 1799—type, by subs. desig. (Lesson, Man. d'Orn., **1**, p. 105, 1828), *Falco aeruginosus* Linnaeus.

Polyborus Vieillot, Anal. Nouv. Orn. Élém., p. 22, April, 1816—type by monotypy, "Caracara" Buffon=*Falco brasiliensis* Gmelin.

Pygargus Koch, Syst. Bair. Zool., **1**, p. 127, July, 1816—type, by monotypy, *Pygargus dispar* Koch=*Falco cyaneus* Linnaeus.

[1] Cf. Crandall, Auk, **32**, p. 368, 1915.

[2] Stejneger (Proc. U. S. Nat. Mus., **6**, p. 65, 1883, and Bull. U. S. Nat. Mus., **29**, p. 212, 1885) explains that Pallas was mistaken in indicating Bering Island as the true habitat of this eagle. Its habitat is principally the mainland of Kamchatka, while it is only an occasional visitor to Bering Island.

[3] One sight record from the Aleutians (Unalaska, May 26, 1906).

Strigiceps Bonaparte,[1] Comp. List Bds. Eur. Amer., p. 5, April, 1838—type, by subs. desig. (Ridgway, in Baird, Brewer, and Ridgway, Hist. N. Amer. Bds., **3**, p. 212, 1874), *Falco cyaneus* Linnaeus.

Spizacircus Kaup,[2] Mus. Senckenb., **3**, p. 258, 1845—type, by restriction (Kaup, Isis, 1847, p. 90) and subs. desig. (Ridgway, in Baird, Brewer, and Ridgway, Hist. N. Amer. Bds., **3**, p. 212, 1874, and Sharpe, Cat. Bds. Brit. Mus., **1**, p. 50, 1874), *Circus macropterus* Vieillot=*Falco brasiliensis* Gmelin.

Spiziacercus Kaup, Arch. Naturg., **16**, (1), p. 32, 1850—type, by monotypy, *Circus macropterus* Vieillot=*Falco brasiliensis* Gmelin.

*Circus cyaneus hudsonius (Linnaeus). MARSH HAWK.

Falco hudsonius Linnaeus, Syst. Nat., 12th ed., **1**, p. 128, 1766—based on "The Ring-tailed Hawk" Edwards, Nat. Hist. Bds., **3**, p. 107, pl. 107, Hudson's Bay.

(?)*Falco spadiceus* Forster, Phil. Trans., **62**, p. 383, 1772—Hudson Bay.

Falco uliginosus Gmelin, Syst. Nat., **1**, (1), p. 278, 1788—based principally upon "Marsh Hawk" Edwards, Glean. Nat. Hist., **2**, p. 173, pl. 291, Pennsylvania.

Falco europogistus (Bosc MS.) Daudin, Traité Élém. d'Orn., **2**, p. 110, 1800—Carolina (location of type not stated).

Circus europogistus Vieillot, Hist. Nat. Ois. Amér. Sépt., **1**, p. 36, pl. 8, 1807—Carolina (descr. of adult male).

Buteo (*Circus*) *cyaneus?* var. *?americanus* (not *Buteo americanus* Vieillot, 1816) Swainson, in Swainson and Richardson, Faun. Bor. Amer., **2**, "1831," p. 55, pl. 29, Feb., 1832—Saskatchewan.

Circus cyaneus hudsonius Schlegel, Mus. Pays-Bas, Circi, p. 2, 1862—part, North America (crit.); Oberholser, Auk, **36**, p. 82, 1919 (crit.); Swann, Syn. List Accip., p. 11, 1919 (chars.; range); idem, Syn. Accip., p. 18, 1921 (range); Barbour, Mem. Nutt. Orn. Cl., **6**, p. 44, 1923—Cuba (winter); Swann, Monog. Bds. Prey, **1**, p. 107, 1925 (monog.); Peters, Bds. World, **1**, p. 265, 1931 (range); Griscom, Bull. Mus. Comp. Zool., **78**, p. 301, 1935—Panama; Traylor, Field Mus. Nat. Hist., Zool. Ser., **24**, p. 203, 1941—Chichen Itza, Yucatan; van Rossem, Occ. Pap., Mus. Zool. Louisiana State Univ., **21**, p. 60, 1945—Sonora (range); Borrero, Caldasia, **3**, No. 14, p. 412, 1945—Sabana de Bogotá, Colombia (common).

Circus cyaneus var. *hudsonius* Baird, Brewer, and Ridgway, Hist. N. Amer. Bds., **3**, p. 214, 1874 (monog.); Cory, Bds. Bahamas, p. 128, 1880—Bahama Islands.

Circus hudsonius Sharpe, Cat. Bds. Brit. Mus., **1**, p. 55, 1874 (monog.); Cherrie, Anal. Inst. Fis.-Geog. Mus. Nac. Costa Rica, **4**, p. 145, 1893—

[1] *Strigiceps* Bonaparte (Giorn. Arcad., **49**, p. 36, 1831) is a nomen nudum.

[2] Kaup originally also included *rutilans* Licht. and *rufulus* Vieill. [both= *Heterospizias meridionalis* (Lath.)], but it results from his account in the *Isis* that the generic name was intended for *Circus macropterus* Vieillot [=*C. brasiliensis* (Gmelin)] which, furthermore, was designated as genotype by both Ridgway and Sharpe.

Boruca, Costa Rica; Salvin and Godman, Biol. Centr.-Amer., Aves, 3, p. 43, 1899—Mexico to Panama; Riley, in Shattuck, The Bahama Islands, p. 362, 1905—New Providence and Great Inagua, Bahamas; Carriker, Ann. Carnegie Mus., 6, p. 451, 1910—Costa Rica (Bolson, Cartago, Azahar de Cartago, Turrúcares); Todd, Ann. Carnegie Mus., **10**, p. 193, 1916—Los Indios, Isle of Pines; Chapman, Bull. Amer. Mus. N. H., **36**, p. 239, 1917—Atrato River, Colombia; Wetmore, Sci. Surv. Porto Rico and Virgin Islands, 9, p. 323, 1927—Puerto Rico; Grinnell, Univ. Calif. Pub. Zool., **32**, p. 107, 1929—Pacific side of northwestern Lower California; Wetmore and Swales, Bull. U. S. Nat. Mus., **155**, p. 115, 1931—Hispaniola; Griscom, Bull. Amer. Mus. N. H., **64**, p. 150, 1932—Guatemala (winter); Bent, Bull. U. S. Nat. Mus., **167**, p. 78, 1937 (life hist.); Dickey and van Rossem, Field Mus. Nat. Hist., Zool. Ser., **23**, p. 128, 1938—El Salvador (October to April).

Circus hudsonicus Sclater and Salvin, Proc. Zool. Soc. Lond., 1879, p. 539—Medellin, Colombia.

Range.—North America from northwestern Alaska, Mackenzie, northern Manitoba, central Quebec, and Newfoundland south to northern Lower California, Texas, Ohio, and Virginia; winters from southern British Columbia, South Dakota, southern Michigan, southern New York, and New England south through Central America to Colombia[1] and Cuba; casual in Hispaniola, Puerto Rico and the Virgin Islands (St. Croix).

Field Museum Collection.—137: Alaska (St. Michael's, 1); British Columbia (Okanagan, 3; Graham Island, 1; Esquinalt, 1); Alberta (Tofield, 2; Rosebud, 1; Calgary, 2); Saskatchewan (Osler, 1; Maple Creek, 1); Manitoba (Winnipeg, 1; Elkhorn, 2); Oregon (Salem, Marion County, 1; Voltage, 1); California (Nigger Slough, Los Angeles County, 1); Arizona (Tucson, 1); Utah (Salt Lake City, 1; Minersville, Beaver County, 1); Colorado (Fraser, 1; Troublesome, 1); New Mexico (Deming, 10); Texas (El Paso, 1; Harlingen, 1; Port Lavaca, 1; Austin, 1); North Dakota (Bottineau, 1; Nelson County, 6; Wolford, 1; Lac aux Morts, 1; Towner County, 9); Nebraska (Lincoln, 1); Arkansas (Arkansas County, 1; Fayetteville, 2); Oklahoma (Alva, 1); Minnesota (Stafford, 1); Wisconsin (Beaver Dam, 18); Illinois (Beach, Lake County, 1; Cook County, 1); Indiana (Bluffton, 1); Prince Edward Island (Malpeque, 1); Massachusetts (Great Island, 1; Monomoy Island, 2; Waltham, 1);

[1] Up to 1944 there have been only two records for the Marsh Hawk's occurrence in Colombia, a female taken by K. T. Salmon at Medellin, Cauca, and an immature male collected by Mrs. Kerr on the Atrato River (Nov. 23, 1909). The Medellin bird can very nearly be matched by specimens from the eastern United States, having but a few rufous markings on the under wing coverts.—C.E.H.

In 1945, Borrero (Caldasia, 3, No. 14, p. 412, 1945) reported this form as being common on the Bogotá Savanna.—B.C.

Rhode Island (Narragansett Pier, 1); Connecticut (Stamford, 2; Warren, 4; East Hartford, 1; New Haven County, 14; Lyme, 4); New York (Shelter Island, 1); New Jersey (Orange, 1); North Carolina (Pea Island, Dare County, 2); Georgia (Roswell, 1); Florida (Miami Beach, 3); Cuba (Minas, Havana, 2); Virgin Islands (St. Croix, 2); Mexico (San José del Cabo, Lower California, 1; San Simon, Sinaloa, 6; Monterey, Nuevo León, 1; Chichen Itza, Yucatan, 1); El Salvador (Divisadero, Morazon, 1); Honduras (Tegucigalpa, Tegucigalpa, 1).

***Circus cyaneus cinereus** Vieillot.[1] CINEREOUS HARRIER.

Circus cinereus Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **4**, p. 454, Dec. 14, 1816—based on "Gavilan del campo ceniciento" Azara, No. 32, Paraguay and La Plata River; d'Orbigny, Voy. Amér. Mérid., Ois., p. 116, 1836—Corrientes, Buenos Aires, Patagonia, and Chile; Darwin, Zool. Beagle, **3**, Birds, p. 30, 1839—Falkland Islands and Chile (Concepción); Fraser, Proc. Zool. Soc. Lond., **11**, p. 109, 1843—Chile; Des Murs, in Gay, Hist. Fís. Pol. Chile, Zool., **1**, p. 239, 1847—Chile; Cassin, in Gilliss, U. S. Ast. Exp., **2**, p. 175, 1855—Chile; Gould, Proc. Zool. Soc. Lond., **27**, p. 94, 1859—Falkland Islands; Sclater, l.c., **28**, p. 384, 1860—Falkland Islands; Burmeister, Journ. Orn., **8**, p. 242, 1860—Mendoza and Santa Fé (Rosario); idem, Reise La Plata St., **2**, p. 439, 1861—Rosario to Mendoza, Argentina; Abbott, Ibis, 1861, p. 152—Falkland Islands; Schlegel, Mus. Pays-Bas, Circi, p. 5, 1862—Falkland Islands, Chile, etc. (crit.); Pelzeln, Reise Nov., Zool., **1**, Vögel, p. 13, 1865—Chile (spec. examined); Sclater, Proc. Zool. Soc. Lond., 1867, pp. 330, 338—Chile (crit.); Philippi, Anal. Univ. Chile, **31**, p. 245, 1868—Chile; Sclater and Salvin, Proc. Zool. Soc. Lond., 1868, p. 143—Conchitas, Buenos Aires; iidem, l.c., 1869, p. 155—Tinta, Dept. Cuzco, Peru; Lee, Ibis, 1873,

[1] *Circus cyaneus cinereus* Vieillot, in juvenile plumage as well as in the garb of the adult male, is so similar to the North American Marsh Hawk that in spite of the differently colored female there can be little doubt about its conspecific relationship. Certain young individuals of the two "species" are hardly distinguishable, and the gap which separates the adult males, while not wholly bridged by variation, is not very great. We are therefore inclined to follow Ridgway, who as long ago as 1874 classified *cyaneus*, *hudsonius*, and *cinereus* as varieties of a single specific entity.

There does not seem to be much local variation in this widespread Harrier, birds from Peru and Ecuador (*poliopterus*) being to all intent identical with others from Paraguay and eastern Argentina. A single adult male from the Falklands (*histrionicus*) is smaller (wing, 300, against 315–335 mm.) and should this difference be corroborated by additional material, it might be advisable to keep the insular birds separate under Quoy and Gaimard's name.

Additional material examined.—Ecuador: Chical, 2; Corazón, 1; Carapungo, 1.—Peru: Lake Junín, 3; Tinta, 1; Arequipa, 1.—Chile: Coquimbo, 2; unspecified, 19; Maquehue, 1; Desagüe, Puerto Montt, Llanquihue, 1; Gregory Bay, 1.—Paraguay: Villa Rica, 3.—Uruguay: Paysandú, 2; Montevideo, 1; Durazno, 1.—Argentina: Buenos Aires (Lomas de Zamora, Espartillar, Los Ingleses, etc.), 23; Neuquén, 1; Nahuel Huapi, Neuquén, 1; Lago Blanco, Chubut, 9; Chubut Valley, 1; Monteleon, Santa Cruz, 2.—Tierra del Fuego: Viamonte, 2.—Falkland Islands, 3.

p. 131—near Frayle Muerto, Córdova; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 56, 1874 (descr.); Allen, Bull. Mus. Comp. Zool., **3**, p. 355, 1876—Moho, Lake Titicaca; Reed, Anal. Univ. Chile, **49**, p. 558, 1877—Cauquenes, Colchagua, Chile; Durnford, Ibis, 1877, pp. 38, 187—Chubut Valley and Buenos Aires; idem, Ibis, 1878, p. 397—Valley of the Rio Chubut; Gibson, Ibis, 1879, p. 411—Cape San Antonio, Buenos Aires; Doering, in Roca, Inf. Ofic. Exp. Rio Negro, Zool., p. 49, 1881—Rio Colorado and Rio Negro; Sharpe, Proc. Zool. Soc. Lond., 1881, p. 10—Coquimbo, Chile; Salvin, l.c., 1883, p. 426—Coquimbo; Taczanowski, Orn. Pér., **1**, p. 171, 1884—Peru; Barrows, Auk, **1**, p. 30, 1884—Buenos Aires (Bahia Blanca, Ventana, Piqüe, Carhué); Withington, Ibis, 1888, p. 469—Lomas de Zamora, Buenos Aires; Burmeister, Anal. Mus. Nac. Buenos Aires, **3**, p. 316, 1888—Rio Chico del Chubut, Patagonia; Sclater and Hudson, Arg. Orn., **2**, p. 57, 1889—Argentina (habits); Holland, Ibis, 1890, p. 425—Espartillar, near Ranchos, Buenos Aires; Oustalet, Miss. Sci. Cap Horn, **6**, p. B.19, 1891—Punta Arenas; Frenzel, Journ. Orn., **39**, p. 114, 1891—southern and western parts of Córdoba Province; Holland, Ibis, 1891, p. 16; idem, l.c., 1892, p. 203—Espartillar, Buenos Aires; Salvadori, Boll. Mus. Zool. Torino, **12**, No. 292, p. 28, 1897—Tala, Salta; Schalow, Zool. Jahrb., Suppl., **4**, p. 696, 1898—Cape Espiritu Santo, Tierra del Fuego; Gosse, in Fitz Gerald, The Highest Andes, p. 351, 1899—Lujan, Mendoza (habits); Salvadori and Festa, Boll. Mus. Zool. Torino, **15**, No. 368, p. 29, 1900—El Troje (Huaca), Vallevicioso (Cotopaxi), Chaupi (Illiniza), and Cañar, Ecuador; Salvadori, Ann. Mus. Civ. Stor. Nat. Genova, (2), **20**, p. 614, 1900—Santa Cruz, Patagonia, and Rio Pescado, Straits of Magellan; Albert, Anal. Univ. Chile, **108**, p. 247, 1901—Chile (monog.); Berlepsch and Stolzmann, Proc. Zool. Soc. Lond., 1902, (2), p. 42—Ingapirca, Junín, Peru; Lillo, Anal. Mus. Nac. Buenos Aires, **8**, p. 202, 1902—Rio Salí, Tucumán; Bruch, Rev. Mus. La Plata, **11**, p. 251, 1904—Rosario, Salta; Lillo, Rev. Letr. Cienc. Soc., **3**, No. 13, p. 61, 1905—Rio Salí, Tucumán; Berlepsch and Stolzmann, Ornis, **13**, p. 129, 1906—Puno, Peru; Ihering, Cat. Faun. Braz., **1**, p. 85, 1907 (range); Crawshay, Bds. Tierra del Fuego, p. 10, 1907—Useless Settlement (habits); Hartert and Venturi, Nov. Zool., **16**, p. 238, 1909—Coronel Dorrego (Buenos Aires) and Tucumán; Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 241, 1910 (range in Argentina); Grant, Ibis, 1911, p. 330—Los Ingleses, Ajó, Buenos Aires; Bertoni, Faun. Parag., p. 42, 1914—Paraguay; Scott and Sharpe, Rep. Princet. Univ. Exped. Patag., **2**, Orn., p. 590, 1915—near Coy Inlet and Rio Chico, Santa Cruz; Hussey, Auk, **33**, p. 389, 1916—environs of Buenos Aires; Reed, Aves Prov. Mendoza, p. 20, 1916—Lujan de Cuyo, Tunuyán, and Tupungato; Chapman, Bull. Amer. Mus. N. H., **36**, p. 240, 1917—Anolaima, Colombia; Sanzin, El Hornero, **1**, p. 149, 1918—Mendoza; Chubb, Ibis, 1919, p. 280—Sumbay, Peru, and Cochabamba, Bolivia; Gibson, Ibis, 1919, p. 506—Cape San Antonio, Buenos Aires; Swann, Syn. List Accip., p. 11, 1919 (range); Tremoleras, El Hornero, **2**, p. 17, 1920—Rivera and Cerro Largo, Uruguay; Wace, l.c., **2**, p. 203, 1920—Falkland Islands; Chapman, Bull. U. S. Nat. Mus., **117**, p. 57, 1921—Ttica-Ttica, Dept. Cuzco, Peru; Swann, Syn. Accip., p. 19, 1921 (range); Barros, Rev. Chil. Hist. Nat., **25**, p. 175, 1921—Rio Blanco, Aconcagua, Chile; Lönnberg and Rendahl, Ark. Zool.,

14, No. 25, p. 32, 1922—Ecuador (Pichincha above Lloa; Corazón; slopes of Iliniza; north of Cotopaxi; Romerillos; Zambiza; Mindo); Daguerre, El Hornero, **2**, p. 266, 1922—Rosas, Buenos Aires; Serié and Smyth, l.c., **3**, p. 44, 1923—Santa Elena, Entre Ríos; Giacomelli, l.c., p. 77, 1923—La Rioja; Pereyra, l.c., p. 174, 1923—Zelaya, Buenos Aires; Peters, Bull. Mus. Comp. Zool., **65**, p. 305, 1923—Neluan and Bariloche, Rio Negro; Marelli, Mem. Min. Obr. Públ. for 1922–23, p. 628, 1924—Buenos Aires; Barros, Rev. Chil. Hist. Nat., **28**, p. 32, 1924—San Bernardo, Santiago, Chile; Housse, l.c., **29**, p. 142, 1925—San Bernardo; Swann, Monog. Bds. Prey, **1**, p. 114, 1925 (monog.); Chapman, Bull. Amer. Mus. N. H., **55**, p. 220, 1926—El Corazón, Cerro Iliniza, and above Chambo, Ecuador; Barros, Rev. Chil. Hist. Nat., **30**, p. 142, 1926—Nilahue, Curicó, Chile; Wetmore, Bull. U. S. Nat. Mus., **133**, p. 108, 1926—Lavalle and below Cape San Antonio, Buenos Aires; idem, Univ. Calif. Publ. Zool., **24**, p. 422, 1926—Chubut (Maitén; Lago Mosquitos, Cholila; Leleque); Bennett, Ibis, 1926, p. 330—Falkland Islands; Wilson, El Hornero, **3**, p. 356, 1926—Venado Tuerto, Santa Fé; Smyth, l.c., **4**, p. 15, 1927—Santa Elena, Entre Ríos, and Cacharí, Buenos Aires (eggs descr.); Pereyra, l.c., **4**, p. 25, 1927—Zelaya, Buenos Aires; Jaffuel and Pirion, Rev. Chil. Hist. Nat., **31**, p. 103, 1927—Marga-Marga Valley, Valparaiso, Chile; Bullock, l.c., **33**, p. 195, 1929—Angol, Chile (nesting); Peters, Bds. World, **1**, p. 266, 1931 (range); Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **19**, p. 271, 1932—Chile (Ramadilla, Copiapó Valley, Atacama; Curicó; Mafil, Valdivia; Desagüe, Llanquihue); Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 454, 1936 (range in Argentina, bibliog.); Pinto, Rev. Mus. Paul., **22**, p. 81, 1938—Brazil (São Lourenço, Rio Grande do Sul) and Argentina (Chubut).

Circus campestris Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **4**, p. 455, Dec. 14, 1816—based on "Gavilan del campo pardo," Azara, No. 33, Paraguay and Rio de la Plata (descr. of young).

Falco frenatus (Illiger MS.) Lichtenstein, Verz. Doubl. Berl. Mus., p. 62, Sept., 1823—based on Azara, No. 33.

Falco histrionicus Quoy and Gaimard, in Freycinet, Voy. Uranie et Physic., Zool., livr. 3, pp. 93, 94, pls. 15 (adult), 16 (young), Aug., 1824—Falkland Islands (type in Paris Museum).

Circus histrionicus King, Zool. Journ., **3**, p. 425 (note), 1827—Port Famine, Straits of Magellan; Lesson, Voy. Coquille, Zool., **1**, p. 616, 1830—Falkland Islands; Bibra, Denks. Math.-Naturw. Kl. Akad. Wiss. Wien, **5**, p. 128, 1853—near Santiago de Chile; Sclater and Salvin, Proc. Zool. Soc. Lond., 1873, p. 186—Cosnipata, Cuzco, Peru; Taczanowski, l.c., 1874, p. 553—Lake Junín, Peru.

Circus polioplerus Tschudi, Arch. Naturg., **10**, (1), p. 266, 1844—Peru (descr. of adult male; type in Neuchâtel Museum); idem, Unters. Faun. Peru., Orn., p. 113, pl. 3, 1846—Peru (type, adult male, stated to be from Hacienda Pacchapata in the wooded region); Pelzeln, Reise Nov., Zool., **1**, Vögel, p. 13, 1865—Chile (crit.; spec. in Vienna Museum examined); Sclater, Proc. Zool. Soc. Lond., 1867, pp. 330, 338—Chile (ex Pelzeln); idem and Salvin, l.c., p. 988—Arequipa, Peru; iidem, l.c., 1868, p. 569—Arequipa.

Spiziacircus histrionicus Sousa, Cat. Coll. Orn. Mus. Lisboa, Psittaci and Accipit., p. 52, 1869—Santa Catharina.

Circus maculosus (not *Aquila maculosa* Vieillot) Goodfellow, Ibis, 1902, p. 221—Pedregal and Corazón, Ecuador.

Range.—South America from Colombia west of the eastern Andes[1] and western Ecuador south through Peru (various records from the Junín and Cuzco regions as well as from Arequipa), eastern Bolivia, Chile, and Argentina to the Straits of Magellan; extending in the east north to Paraguay, Entre Ríos, Uruguay, and extreme southern Brazil (Rio Grande do Sul and Santa Catharina); Falkland Islands.[2]

Field Museum Collection.—13: Colombia (Cumbál, Narino, 1); Ecuador (Montes del Parambá, 2; Cerro Mojanda, Pichincha, 1; Mount Cotopaxi, Esmeraldas, 1; Cienaga del Chimborazo, 1; Cerro Cayambe, Pichincha, 1); Chile (Ramadillo, Atacama, 1; Cordillera de Curico, Atacama, 1; Lautaro, Cautín, 1; Mafil, Valdivia, 1; Rio Ciaike, Magallanes, 2).

*Circus brasiliensis (Gmelin). LONG-WINGED HARRIER.

Falco brasiliensis Gmelin, Syst. Nat., 1, (1), p. 262, 1788—based on "Caracara" Marcgrave, Hist. Nat. Bras., p. 211, northeastern Brazil=Pernambuco (cf. Wetmore, Bull. U. S. Nat. Mus., 133, p. 97, note 79, 1926); Schneider, Journ. Orn., 86, pp. 94, 95, 1938 (crit.).[3]

Falco buffoni Gmelin, Syst. Nat., 1, (1), p. 277, 1788—based on "Cayenne Ringtail" Latham, Gen. Syn. Bds., 1, (1), p. 91, Cayenne (type in coll. of Miss Blomefield); Gyldenstolpe, K. Svensk. Vetensk. Akad. Handl., (3), 23, p. 54, 1945—Bolivia (Bresta and Orion, El Beni).

Aquila maculosa Vieillot, Hist. Nat. Ois. Amér. Sept., 1, p. 28, pl. 3 bis, Dec. 1, 1807—"l'Amérique septentrionale," errore (type in coll. of P. L. Vieillot).

Circus albicollis Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., 4, p. 456, Dec. 14, 1816—based on "Gavilan de estero chorreado" Azara, No. 12, Paraguay (descr. of young).

Circus macropterus Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., 4, p. 458, Dec. 14, 1816—based on "Gavilan del campo alilargo," Azara, No. 31, Paraguay and La Plata (descr. of adult male); Kaup, Isis, 1847, col. 103

[1] The British Museum has an immature male, which was collected by H. E. Bowle on November 7, 1914, in the Bogotá region, and which is undoubtedly referable to the South American Marsh Hawk. *C. cinereus* had already been recorded by Chapman from Anolaima. These are the only two published instances of its occurrence in Colombia, except for the specimen recorded above.

[2] According to J. E. Hamilton (in litt.), very nearly extinct on the Falkland Islands.

[3] Marcgrave's drawing reproduced in Schneider's paper does not look very much like any of the plumages of the present species, but I am assured by Dr. Stresemann that there is no possible doubt about its identification with the Long-winged Harrier.

(descr. of male and young female; crit.); Cassin, in Gilliss, U. S. Astr. Exp., **2**, p. 175, 1855—Chile; Philippi, Arch. Naturg., **21**, p. 14, 1855—Chile; Schlegel, Mus. Pays-Bas, Circi, p. 8, 1862—part, spec. 1, Brazil; Léotaud, Ois. Trinidad, p. 49, 1866—Trinidad; Pelzeln, Orn. Bras., **1**, p. 8, 1867—São Paulo (Tamandatahy, Irisanga), Goyáz (Araguay), Matto Grosso (Cuyabá), and Amazonia (Villa de Tapajóz [=Santarém]); Sclater, Proc. Zool. Soc. Lond., 1867, pp. 330, 338—Chile; Philippi, Anal. Univ. Chile, **31**, p. 246, 1868—Chile (central provinces); Sclater and Salvin, Proc. Zool. Soc. Lond., 1868, p. 143—Conchitas, Buenos Aires; iidem, l.c., 1869, p. 252—plain of Valencia, Venezuela; Salvin, Ibis, 1875, p. 372—Mas Afuera; Reed, Anal. Univ. Chile, **49**, p. 558, 1877—Cauquenes, Colchagua, Chile; Doering, in Roca, Inf. Ofic. Exp. Rio Negro, Zool., p. 50, 1881—pampa south to the Rio Colorado; Stempelmann and Schulz, Bol. Acad. Nac. Córdoba, **10**, p. 396, 1887—Córdoba; Sclater and Hudson, Arg. Orn., **2**, p. 58, 1889—Argentina; Aplin, Ibis, 1894, p. 194—Uruguay; Holland, Ibis, 1895, p. 216—Santa Elena; idem, Ibis, 1897, p. 168—Santa Elena, Buenos Aires (nest and eggs descr.); Albert, Anal. Univ. Chile, **108**, p. 251, 1901—Chile (monog.); Philippi, Anal. Mus. Nac. Santiago, **15**, p. 5, 1902—Chile; Gibson, Ibis, 1919, p. 506—Cape San Antonio, Buenos Aires; Lataste, Extr. Proc. Verb. Séa. Soc. Linn. Bordeaux, 1923, p. 167—Peñaflor, Santiago, Chile.

Circus leucophrys Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **4**, p. 464, Dec. 14, 1816—"dans l'Inde," errore (type in Paris Museum); Pucheran, Rev. Mag. Zool., (2), **2**, p. 82, 1850 (crit.).

Falco palustris Wied, Reise Bras., **1**, p. 110, 1820—near Battuba, Rio de Janeiro (descr. of young male; type in coll. of Prince Wied, now in the American Museum of Natural History, New York; cf. Allen, Bull. Amer. Mus. N. H., **2**, p. 266, 1889); Temminck, Nouv. Rec. Pl. Col., livr. 4,[1] pl. 22 (=adult male), Nov., 1820—Brésil; Wied, Beitr. Naturg. Bras., **3**, (1), p. 224, 1830—Rio de Janeiro (lagoons near Sagoarema, Marica, and Araruama; Lagõa Feia, Rio Itabapuana).

Circus superciliosus Lesson, Traité d'Orn., livr. 2, p. 87, pl. 3, fig. 1 (=adult male), May, 1830—Brazil; Burmeister, Syst. Uebers. Th. Bras., **2**, (1), p. 116, 1855—Brazil; idem, Proc. Zool. Soc. Lond., 1868, p. 634—near Buenos Aires.

Buteo macropterus d'Orbigny, Voy. Amér. Méríd., Ois., p. 112, 1836—confines of Paraguay, Buenos Aires, and Bolivia (Chiquitos).

Circus megaspilus Gould, Proc. Zool. Soc. Lond., **5**, p. 10, Oct., 1837—no locality stated (type, from Maldonado, Uruguay, in the British Museum examined; descr. of young); Darwin, Zool. Beagle, **3**, Birds, p. 29, 1839—Maldonado; Gray, Gen. Bds., **1**, p. [32], pl. 11 (=young), 1845; Pelzeln, Reise Nov., Zool., **1**, Vögel, p. 14, 1865—Chile (spec. in Vienna Museum examined).

Circus maculosus Sharpe, Cat. Bds. Brit. Mus., **1**, p. 62, 1874 (monog.); Barrows, Auk, **1**, p. 30, 1884—pampas of Buenos Aires and Concepción

[1] According to Temminck the wrapper of livr. 4 (published in Nov., 1820) bore *Falco gularis*, but that term was suppressed when he discovered Wied's earlier name. The letterpress to pl. 22 evidently was not issued until April, 1822, when the text to the preceding twenty parts was supplied, together with livr. 21.

del Uruguay, Entre Ríos; Quelch, Timehri, (2), 6, p. 145, 1892—British Guiana (Abary River, Mahaicony and Hoobaboo Creeks, etc.); Ihering, Ann. Est. Rio Grande do Sul, 16, p. 139, 1899—Rio Grande do Sul; idem, Rev. Mus. Paul., 3, p. 345, 1899—São Paulo; Lillo, Anal. Mus. Nac. Buenos Aires, 8, p. 202, 1902—Rio Salí, Tucumán; idem, Rev. Letr. Cienc. Soc., 3, No. 13, p. 61, 1905—Rio Salí; Ihering, Cat. Faun. Braz., 1, p. 85, 1907—Rio Grande do Sul (São Lourenço) and Buenos Aires; Dabbene, Anal. Mus. Nac. Buenos Aires, 18, p. 241, 1910 (range in Argentina); Grant, Ibis, 1911, p. 330—Luiconia (Ajó), Buenos Aires, and Alto Paraguay, Bolivia; idem, Ibis, 1912, p. 277—Argentina (plumages); Bertoni, Faun. Parag., p. 42, 1914—Paraguay; Hussey, Auk, 33, p. 389, 1916—La Plata; Reed, Av. Prov. Mendoza, p. 20, 1916—San Rafael, Mendoza; Arribálzaga, El Hornero, 2, p. 92, 1920—Chaco.

Circus buffoni Berlepsch, Nov. Zool., 15, p. 290, 1908—Cayenne (nomencl.); Stone, Proc. Acad. Nat. Sci. Phila., 65, p. 194, 1913—La Pedrita, Rio Uracoa, Venezuela; Snethlage, Bol. Mus. Goeldi, 8, p. 125, 1914—São Natal, Marajó, Brazil; Scott and Sharpe, Rep. Princet. Univ. Exped. Patag., 2, Orn., p. 602, 1915 (descr.; synon.); Chubb, Bds. Brit. Guiana, 1, p. 218, 1916—Abary River; Cherrie, Sci. Bull., Mus. Brookl. Inst., 2, p. 344, 1916—La Pedrita, Orinoco Delta (ex Stone); Swann, Syn. List Accip., p. 14, 1919 (range); Tremoleras, El Hornero, 2, p. 17, 1920—Flores, Uruguay; Swann, Syn. Accip., p. 23, 1921 (range); Daguerre, El Hornero, 2, p. 266, 1922—Rosas, Buenos Aires; Serié and Smyth, l.c., 3, p. 54, 1923—Santa Elena, "Entre Ríos"=Buenos Aires (ex Holland); Pereyra, l.c., p. 164, 1923—Zelaya, Buenos Aires; Marelli, Mem. Min. Obr. Públ. for 1922-23, p. 628, 1924—Rosas, Buenos Aires; Swann, Monog. Bds. Prey, 1, p. 136, 1925 (monog.); Wetmore, Bull. U. S. Nat. Mus., 133, p. 108, 1926—Las Palmas, Chaco and Riacho Pilaga, Formosa (plumages); Young, Ibis, 1929, p. 6—Abary Savanna, British Guiana; Naumburg, Bull. Amer. Mus. N. H., 60, p. 104, 1930—Matto Grosso; Laubmann, Wiss. Erg. Deuts. Gran Chaco Exp., Vögel, p. 108, 1930—Lapango and San José, Formosa; Peters, Bds. World, 1, p. 266, 1931 (range); Hellmayr, Field Mus. Nat. Hist., Zool. Ser., 19, p. 272, 1932—central provinces of Chile (Santiago and Colchagua); Roberts, Trop. Agric., 11, p. 89, 1934—Caroni Swamp, Trinidad; Belcher and Smooker, Ibis, 1934, p. 593—Caroni Marshes, Trinidad (breeding!); Steullet and Deautier, Obr. Cinc. Mus. La Plata, 1, p. 457, 1936 (bibliog.; range in Argentina); Pinto, Rev. Mus. Paul., 22, p. 82, 1938—São Paulo (Iguapé), Rio Grande do Sul (Itaquy), and Buenos Aires.

Circus maculosa Hartert and Venturi, Nov. Zool., 16, p. 238, 1909—Barracas al Sud, Buenos Aires.

Range.—Argentina south to the Rio Colorado;[1] eastern Bolivia (Chiquitos); Paraguay; Uruguay; central Chile (provinces of Santiago and Colchagua; one record from Mas Afuera); southern Brazil, from Rio Grande do Sul, north to Rio de Janeiro and Matto

[1] There is absolutely no foundation for the statement by certain authors (Sharpe, Swann, and others) that the range of this Harrier extends to the Straits of Magellan, the most southerly substantiated locality being the Rio Colorado, recorded by Doering.

Grosso. Also recorded from scattered localities in northern Brazil (São Natal, Marajó; Santarém, Rio Tapajóz), French Guiana (Cayenne), British Guiana (Abary River region; Buxton), Venezuela (Zulia; La Pedrita, Orinoco Delta; plains of Valencia, Carabobo), and from the Island of Trinidad.[1]

Field Museum Collection.—9: Venezuela (Encontrados, Zulia, 2; Rio Catatumbo, Zulia, 1); British Guiana (Buxton, 3); Brazil (Vaccaria, Matto Grosso, 1); Paraguay (170–195 km. west of Puerto Casado, 2).

Genus GERANOSPIZA Kaup[2]

Ischnosceles (not *Ischnoscelis* Burmeister, 1842) Strickland, Ann. Mag. Nat. Hist., 13, p. 409, June, 1844—type, by orig. desig., *Falco gracilis* Temminck.

Geranospiza Kaup, Isis, 1847, col. 143—new name for *Ischnosceles* Strickland, preoccupied.

Geranopus Kaup, Contr. Orn., 1850, p. 65—new name for *Ischnosceles* Strickland, preoccupied.

Geranospizias Sundevall, Meth. Nat. Av. Disp. Tent., p. 107, 1873—new name for *Geranospiza* Kaup.

Geranospiza caerulescens livens Bangs and Penard.[3] NORTHERN CRANE HAWK.

[1] The center of its breeding range is apparently in northern Argentina. Its nest and eggs have been taken by Holland at Santa Elena (near Media Luna), in the northwestern corner of Buenos Aires Province, his series being now in the British Museum. The bird may be expected to breed in the adjoining parts of Paraguay and possibly Bolivia, although it should be noted that Barrows lists it only as a migratory (winter) visitor for Concepción del Uruguay in Entre Ríos. No evidence exists for its breeding in Chile, where it is stated to be rather rare, and its occurrence on the Island of Mas Afuera certainly is but accidental. The scattered records from northern Brazil, Guiana, and Venezuela probably indicate the northern limits of its northward migration after the breeding period.

The eggs taken by Belcher and Smooker in Trinidad and ascribed to this Harrier are more likely to belong to some other species. C. B. Grant (Ibis, 1912, p. 277) has described the puzzling plumages.

Additional material examined.—Chile: Mas Afuera, 1; central Chile, 1.—Argentina: Monteil Island, Rio Paraná, 1; Ajó, Buenos Aires, 15; Conchitas, Buenos Aires, 1; Santa Elena (near Media Luna), Buenos Aires, 1.—Paraguay: Villa Rica, 4.—Uruguay: Montevideo, 1; Maldonado, 1.—Brazil: Lagõa dos Patos, Rio Grande do Sul, 1; Irisanga, São Paulo, 1; Marajó Island, 1.—British Guiana: Abary River, 3; Annai (March, May), 2; Demerara, 2; unspecified, 1.—French Guiana: Cayenne, 1.—Venezuela: Plain of Valencia, Carabobo, 1.

[2] The name of this genus may have to be changed, since *Ischnosceles* Strickland does not seem to be invalidated by the earlier *Ischnoscelis* Burmeister under the International Rules of Nomenclature.

[3] *Geranospiza caerulescens livens* Bangs and Penard: Similar to *G. c. niger* and about the same size, but much paler, not blackish, between neutral gray and

Geranospiza caerulescens livens Bangs and Penard, Proc. Biol. Soc. Wash., 34, p. 89, June 30, 1921—Alamos, Sonora, Mexico (type in Museum of Comparative Zoology, Cambridge, Mass.).

Geranospiza nigra livens Swann, Monog. Bds. Prey, 1, p. 157, 1925—Alamos; Peters, Bds. World, 1, p. 268, 1931—Alamos; van Rossem, Bull. Mus. Comp. Zool., 77, p. 430, 1934—Alamos; idem, Occ. Pap., Mus. Zool. Louisiana State Univ., 21, p. 60, 1945—Sonora (resident in extreme south).

Range.—Northwestern Mexico, in State of Sonora (known only from a breeding pair from Alamos).

***Geranospiza caerulescens nigra** (Du Bus). BLACKISH CRANE HAWK.

Ischnosceles niger Du Bus, Bull. Acad. Roy. Sci., Lettr., et Beaux Arts, Belg., 14, (2), p. 102, 1847—Mexico (type in Brussels Museum); idem, Esq. Orn., livr. 4, pl. 16, 1848—Mexico; Salvin, Ibis, 1870, p. 216—Mina de Chorcha, Chiriquí, Panama.

Geranospiza gracilis (not *Falco gracilis* Temminck) Sclater, Proc. Zool. Soc. Lond., 24, p. 285, 1856—Córdoba, Vera Cruz.

Geranospiza(ias) caerulescens (not *Sparvius caerulescens* Vieillot) Sclater and Salvin, Ibis, 1859, p. 218—Guatemala; iidem, l.c., 1860, p. 44—Dueñas, Guatemala; Lawrence, Ann. Lyc. Nat. Hist. N. Y., 7, p. 289, 1861—Atlantic side of the Isthmus of Panama; Stone, Proc. Acad. Nat. Sci. Phila., 1890, p. 204—Shkolak, Yucatan.

Geranospiza nigra Sclater and Salvin, Proc. Zool. Soc. Lond., 1870, p. 838—[San Pedro], Honduras; Lawrence, Bull. U. S. Nat. Mus., 4, p. 39, 1876—Santa Efigenia, Tehuantepec, Oaxaca; Richmond, Proc. U. S. Nat. Mus., 18, p. 628, 1896—Alta Mira, Tamaulipas; Wetmore, Proc. U. S. Nat. Mus., 87, p. 186, 1939 (considered distinct species having two races, *livens* and *balzarensis;* dist. chars.).

Geranospiza caerulescens var. *niger* Ridgway, Proc. Bost. Soc. N. H., 16, p. 85, 1873—Mazatlan and Tehuantepec (crit.).

Geranospiza gracilis var. *niger* Lawrence, Mem. Bost. Soc. N. H., 2, p. 299, 1874—Mazatlan, Sinaloa.

Geranospizias niger(ra) Sharpe, Cat. Bds. Brit. Mus., 1, p. 82, 1874—Mexico to Panama; Gurney, Ibis, 1875, p. 233 (crit.); Sumichrast, La Naturaleza, 5, p. 235, 1881—Cacoprieto, Oaxaca, and Tonalá, Chiapas; Zeledón, Anal. Mus. Nac. Costa Rica, 1, p. 127, 1887—Pózo Azúl de Pirrís, Costa Rica; Salvin, Ibis, 1889, p. 375—Meco Island, Yucatan; idem, Ibis, 1890, p. 89—Meco Island; Salvin and Godman, Biol. Centr.-Amer., Aves, 3, p. 52, 1899—Mexico (Mazatlan; Presidio de Mazatlan; Tecolapa, Colima; Córdoba; Santa Efigenia and Cacoprieto, Oaxaca; Tonalá, Chiapas; Buctzotz, Peto, Shkolak, and Meco Island, Yucatan), British Honduras (Orange Walk), Guatemala (Dueñas, Savanna Grande, Es-

deep neutral gray; larger than *G. c. caerulescens* and darker, being intermediate between the nominate race and *G. c. nigra.* Wing, 334, (female) 349; tail, 233, (female) 242; tarsus, 91, (female) 97; culmen from cere, 22.

cuintla), Honduras (San Pedro), Nicaragua (Chinandega, Ocotal), Costa Rica (Pózo Azúl de Pirrís), and Panama (Mina de Chorcha, Lion Hill); Bangs, Auk, 18, p. 358, 1901—Divalá, Chiriquí; idem, Auk, 24, p. 290, 1907—El Pózo del Rio Grande, Costa Rica; Carriker, Ann. Carnegie Mus., 6, p. 453, 1910—Bolson, Tenorio, Guanacaste, and Bebedéro, Costa Rica; Phillips, Auk, 28, p. 73, 1911—Cañon Guiaves, Tamaulipas; Rendahl, Ark. Zool., 12, No. 8, p. 8, 1919—Sipurio, Talamanca, Costa Rica.

Geranospizias caerulescens niger Swann, Syn. List Accip., p. 17, 1919—Mexico to Panama; idem, Syn. Accip., p. 28, 1921 (range); Griscom, Bull. Amer. Mus. N. H., 64, p. 151, 1932—Guatemala.

Geranospiza niger niger Swann, Monog. Bds. Prey, 1, p. 156, 1925 (monog.).

Geranospiza nigra nigra Peters, Bds. World, 1, p. 268, 1931 (range); Griscom, Bull. Mus. Comp. Zool., 78, p. 301, 1935—to the Canal Zone, Panama.

Range.—Tropical zone of Mexico, from Tamaulipas and Sinaloa southward through Central America to the Canal Zone, Panama.

Field Museum Collection.—4: Mexico (El Bonito, San Luis Potosí, 1); El Salvador (San Sebastian, La Paz, 1; Rio San Miguel, San Miguel, 1); Nicaragua (San Geronimo, Chinandega, 1).

***Geranospiza caerulescens balzarensis** W. L. Sclater.[1] ECUADORIAN CRANE HAWK.

Geranospiza niger balzarensis W. L. Sclater, Bull. Brit. Orn. Cl., 38, p. 45, March 4, 1918—Balzar, Prov. Guayas, Ecuador (type in the British Museum examined); Swann, Monog. Bds. Prey, 1, p. 157, 1925—western Ecuador (monog.); Peters, Bds. World, 1, p. 268, 1931—eastern Panama to western Ecuador; Griscom, Bull. Mus. Comp. Zool., 78, p. 301, 1935—extreme eastern Panama.

Geranospiza caerulescens (not *Sparvius caerulescens* Vieillot) Sclater, Proc. Zool. Soc. Lond., 28, p. 288, 1860—Babahoyo, Ecuador; Taczanowski, l.c., 1877, p. 329—Lechugal, Rio Zurumilla, Dept. Tumbez, Peru; idem, Orn. Pér., 1, p. 168, 1884—Lechugal.

Geranospizias caerulescens Sharpe, Cat. Bds. Brit. Mus., 1, p. 81, 1874—part, spec. a, Puná Island; Salvadori and Festa, Boll. Mus. Zool. Torino, 15, No. 368, p. 29, 1900—Vinces and Rio Peripa, Ecuador; Chubb, Ibis, 1919, p. 280—Marropon, Dept. Piura, Peru.

Geranospizias caerulescens balzarensis Swann, Syn. Accip., p. 27, 1921—Ecuador and Peru (chars.); Chapman, Bull. Amer. Mus. N. H., 55, p. 223, 1926—Daule and Puná Island, Ecuador; Griscom, Bull. Mus. Comp. Zool., 72, p. 316, 1932—Permé, Darien.

[1] *Geranospiza caerulescens balzarensis* W. L. Sclater differs from *G. c. nigra* by its lighter, dusky slate to bluish slate instead of blackish coloration. It is truly intermediate to *G. c. caerulescens*, which is, however, still lighter and more plumbeous in tone.

Additional material examined.—Ecuador: Balzar, 2; Puná Island, 1; unspecified, 1.

Range.—Tropical zone of extreme eastern Panama (Rio Tuyra and Permé, Darien) through Pacific Colombia and Ecuador to northwestern Peru (Rio Zurumilla, Dept. Tumbez; Marropon, Dept. Piura).

Field Museum Collection.—3: Colombia (Rio Jurado, Choco, 1); Ecuador (Arenillas, El Oro, 2).[1]

***Geranospiza caerulescens caerulescens** (Vieillot). GRAY CRANE HAWK.

Sparvius caerulescens Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **10**, p. 318, 1817—"l'Amérique méridionale";[2] idem, Tabl. Enc. Méth., Orn., livr. 93, p. 1262, 1823—same locality (type stated to be in Paris Museum; cf. Pucheran, Rev. Mag. Zool., (2), **2**, p. 90, 1850).

Falco hemidactylus Temminck, Nouv. Rec. Pl. Col., livr. 1, pl. 3, Aug., 1820—Brazil (type in collection of Laugier de Chartrouse, present location unknown).

Ischnosceles gracilis (not *Falco gracilis* Temminck) Cabanis, in Schomburgk, Reisen Brit. Guiana, **3**, "1848," p. 737, 1849—British Guiana.

Nisus hemidactylus Schlegel, Mus. Pays-Bas, Astures, p. 53, 1862—part, spec. 1, 2, Guiana and Surinam.

Geranopus hemidactylus Pelzeln, Orn. Bras., **1**, p. 7, 1868—Barra do Rio Negro [=Manáos], Marabitanas (Rio Negro), Rio Takutú, Forte do Rio Branco, and Serra Arimani (Rio Branco), Brazil.

Geranospiza caerulescens var. *caerulescens* Ridgway, Proc. Bost. Soc. N. H., **16**, p. 84, 1873 (crit.; excl. of Puná Island).

Geranospizias caerulescens Sharpe, Cat. Bds. Brit. Mus., **1**, p. 81, 1874—part, Guiana and Amazonia (descr. of "type of *F. hemidactylus* Temm.");[3] Gurney, Ibis, 1875, p. 233 (crit.); idem, List Diurn. Bds. Prey, p. 25, 1884 (crit.); (?)Riker and Chapman, Auk, **8**, p. 161, 1891—Santarém; Allen, Bull. Amer. Mus. N. H., **13**, p. 130, 1900—Bonda, Colombia; Berlepsch and Hartert, Nov. Zool., **9**, p. 114, 1902—Altagracia and Capuchin, Rio Orinoco, Venezuela; Ménégaux, Bull. Mus. Hist. Nat. Paris, **10**, p. 108, 1904—St. Georges d'Oyapock, French Guiana; Berlepsch, Nov. Zool., **15**, p. 290, 1908—French Guiana (Cayenne, St. Georges d'Oyapock); Stone, Proc. Acad. Nat. Sci. Phila., **65**, p. 194, 1913—Manimo River, Venezuela; Cherrie, Sci. Bull., Mus. Brookl. Inst., **2**, p. 345, 1916—Altagracia, Capuchin, and Caicara, Rio Orinoco, Venezuela; Bangs and Penard, Bull. Mus. Comp. Zool., **62**, p. 35, 1918—vicinity of Paramaribo, Surinam; Chubb, Bds. Brit. Guiana, **1**, p. 224, 1926—Takutú Mountains.

[1] While the Colombian specimen, an adult, is darker than two from British Guiana, the Ecuadorian examples, both immature, have the upper parts as in the Guiana birds. All three west coast specimens, however, are larger.—B.C.

[2] Cayenne designated as type locality by Berlepsch and Hartert (Nov. Zool., **9**, p. 114, 1902).

[3] Sharpe evidently took for "the type" spec. No. 1 ("mâle, Guyane, acquis en 1858") in the Leiden Museum.

Geranospizias gracilis Salvin, Ibis, 1886, p. 76—British Guiana (ex Cabanis).

Geranospiza caerulescens(?) Snethlage, Bol. Mus. Goeldi, 8, p. 127, 1914—part, Marajó (Teso Arary) and Cussary, Brazil; Todd and Carriker, Ann. Carnegie Mus., 14, p. 147, 1922—Bonda, Mamatoco, Guiraca, and Fundación, Santa Marta, Colombia; Swann, Monog. Bds. Prey, 1, p. 154, pl. [10], upper fig., 1925 (monog.); Peters, Bds. World, 1, p. 268, 1931 (range); Wetmore, Proc. U. S. Nat. Mus., 87, p. 186, 1939—El Sombrero, Venezuela (considered distinct species; dist. chars.); Dugand, Rev. Acad. Colomb. Cienc., Bogotá, 4, p. 398, pl. 5, fig. 28, 1941.

Geranospizias caerulescens caerulescens Swann, Syn. List Accip., p. 17, 1919—part, Venezuela, Guiana, and Colombia (chars.; hab.); idem, Syn. Accip., p. 27, 1921 (chars.; range); Chapman, Bull. Amer. Mus. N. H., 55, p. 223, 1926—Rio Napo, Ecuador.

Geranospiza caerulescens caerulescens Hellmayr, Nov. Zool., 28, p. 178, 1921 (range); Gyldenstolpe, K. Svensk. Vetensk. Akad. Handl., (3), 22, p. 28, 1945—João Pessõa, Rio Juruá, Brazil (disc.).

Range.—Eastern Colombia (Santa Marta region); Venezuela, the Guianas, Brazil south to the Amazon Valley, and eastern Ecuador (Rio Napo).[1]

Field Museum Collection.—15: Venezuela (Catatumbo, Zulia, 1); British Guiana (Buxton, 2); Brazil (Labrea, Rio Purús, 1; Canutama, Rio Purús, 1; Igarape Aniba, Amazonas, 5; Lago do Baptista, Amazonas, 2; Obidos, Pará, 1; Boca Ituqui, Pará, 2).

*Geranospiza caerulescens gracilis (Temminck). BANDED CRANE HAWK.

Falco gracilis Temminck, Nouv. Rec. Pl. Col., livr. 16, pl. 91, Nov., 1821—"les parties orientales du Brésil" [2] (type in the Leyden Museum).

Falco hemidactylus (not of Temminck) Wied, Beitr. Naturg. Bras., 3, (1), p. 97, 1830—eastern Brazil.

Nisus hemidactylus Schlegel, Mus. Pays-Bas, Astures, p. 53, 1862—part, spec. 3, Brazil (type of *F. gracilis* Temm.).

Geranospiza gracilis Ridgway, Proc. Bost. Soc. N. H., 16, pp. 83, 84, 1873—Brazil, in part (crit.); Swann, Monog. Bds. Prey, 1, p. 158, pl. [10], lower

[1] Birds from Manáos and the Rio Negro are thoroughly typical, and agree with others from Guiana, as does also a single adult of native "Bogotá" preparation.

Additional material examined.—French Guiana: Cayenne, 1.—Surinam: Rijweg, near Paramaribo, 1; Kwata, 1; unspecified, 1.—Venezuela: Maturin, 1; plain of Valencia, 1; Altagracia, Orinoco, 1; Capuchin, Orinoco, 1.—Colombia: "Bogotá," 2.—Brazil: Rio Takutú, 1; Serra Arimani, Rio Branco, 1; Forte do São Joaquim, Rio Branco, 1; Manáos, 1; Marabitanas, Rio Negro, 2.

[2] The type appears to have been collected by Georg Wilhelm Freyreiss (misspelled "Treyreis" by Temminck), who worked chiefly in the vicinity of Colonia Leopoldina, near Caravellas, southern Bahia (cf. Freyreiss, Beiträge zur näheren Kenntnis des Kaiserthums Brasilien, 1, Frankfurt am Main, 1824), which we may, therefore, accept as type locality.

fig., 1925—part, eastern Brazil; Peters, Bds. World, **1**, p. 268, 1931—part, eastern Brazil.

Geranospizias gracilis Gurney, List Diurn. Bds. Prey, p. 25, 1884 (in part); Reiser, Denks. Math.-Naturw. Kl. Akad. Wiss. Wien, **76**, p. 89, 1910—Bahia (Fazenda da Serra and Fazenda do Estreito, Rio Grande; Fazenda Ingazeira, Rio Preto) and Piauhy (Parnaguá); idem, l.c., p. 202, 1925—same localities.

Geranospiza caerulescens (not *Sparvius caerulescens* Vieillot) Snethlage, Bol. Mus. Goeldi, **8**, p. 127, 1914—part, Maranhão.

Geranospiza caerulescens gracilis Hellmayr, Nov. Zool., **28**, p. 178, 1921—part, Maranhão, Ceará, and Piauhy; idem, Field Mus. Nat. Hist., Zool. Ser., **12**, p. 457, 1929—Parnaguá, Piauhy (crit.); Pinto, Rev. Mus. Paul., **19**, p. 99, 1935—Cachoeira Grande, Rio Jucurucú, Bahia.

Geranospiza gracilis Wetmore, Proc. U. S. Nat. Mus., **87**, p. 186, 1939 (has two races, *gracilis* and *flexipes*).

Range.—Northeastern Brazil, from Maranhão, Piauhy, and Ceará south to central Goyaz and Bahia.[1]

Field Museum Collection.—2: Brazil (Parnaguá, Piauhy, 1; Nova Roma, Goyaz, 1).

*Geranospiza caerulescens flexipes Peters.[2] SOUTHERN BANDED CRANE HAWK.

Geranospiza caerulescens flexipes Peters, Proc. Biol. Soc. Wash., **48**, p. 72, May 3, 1935—Resistencia, Chaco, Argentina (type in Museum of Comparative Zoology, Cambridge); Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 459, 1936—Orán, Salta; Bond and de Schauensee, Proc. Acad. Nat. Sci. Phila., **95**, p. 178, 1943—Rio Lipeo, Bolivia.

Nisus hemidactylus (not *Falco hemidactylus* Temminck) d'Orbigny, Voy. Amér. Mérid., Ois., p. 86, 1835—Corrientes, Argentina, and Chiquitos, Bolivia; Lafresnaye and d'Orbigny, Syn. Av., **1**, in Mag. Zool., **7**, cl. 2, p. 4, 1837—same localities.

Nisus gracilis (not *Falco gracilis* Temminck) Burmeister, Syst. Uebers. Th. Bras., **2**, p. 77, 1855—Nova Friburgo, Rio de Janeiro; idem, Proc. Zool. Soc. Lond., 1868, p. 633—"vicinity of Buenos Aires."

[1] Possibly the birds recorded as *G. caerulescens* from Santarém and the Island of Marajó are referable to the present form, although those from the Rio Purús are typical *caerulescens*.

Additional material examined.—Maranhão: Miritiba, 1.—Ceará: unspecified, 1.—Piauhy: Parnaguá, 1.—Bahia: Fazenda da Serra, Rio Grande, 1; Fazenda Ingazeira, Rio Preto, 1; Lamarão, 2.

[2] *Geranospiza caerulescens flexipes* Peters: Similar to *G. c. gracilis* in pale gray coloration, white banded under parts, and deep buff under tail coverts, but decidedly larger. Wing, 300–308, (female) 320–360 mm.

Additional material examined.—Bolivia: Santa Cruz, 2.—Brazil: Pansecco, Matto Grosso, 1; Cuyabá, Matto Grosso, 1; Descalvados, Matto Grosso, 1; Rio Araguay, Goyáz, 2; Sabauna, São Paulo, 1.—Argentina: Corrientes, 1.

Geranopus gracilis Pelzeln, Orn. Bras., **1**, p. 7, 1867—Goyáz (Rio Araguay) and Matto Grosso (Cuyabá, Barra do Jaurú, Pansecco).

Geranospiza gracilis Reinhardt, Vidensk. Medd. Naturhist. Foren., 1870, p. 69—Lapa Vermelha, near Lagõa Santa, Minas Geraes; Ridgway, Proc. Bost. Soc. N. H., **16**, pp. 83, 84, 1873—Paraguay and Brazil (crit.); Swann, Monog. Bds. Prey, **1**, p. 158, 1925—part, southern Brazil, Bolivia, Paraguay, and Argentina; Wetmore, Bull. U. S. Nat. Mus., **133**, p. 107, 1926—west of Puerto Pinasco, Paraguay; Peters, Bds. World, **1**, p. 268, 1931—part, southern Brazil, Bolivia, Paraguay, and Argentina.

Geranospiza(ias) caerulescens (not *Sparvius caerulescens* Vieillot) Lee, Ibis, 1873, p. 135—Rio Gato, near Gualeguaychu, Entre Ríos; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 81, 1874—part "Buenos Aires" and Bolivia; White, Proc. Zool. Soc. Lond., 1882, p. 623—Campo Colorado, Orán, Salta; Sclater and Hudson, Arg. Orn., **2**, p. 67, 1889—Salta and upper Uruguay, Misiones; Kerr, Ibis, 1892, p. 143—lower Pilcomayo; Allen, Bull. Amer. Mus. N. H., **5**, p. 147, 1893—Chapada, Matto Grosso; Ihering, Ann. Est. Rio Grande do Sul, **16**, p. 139, 1899—Barra do Rio Camaquam, Rio Grande do Sul; idem, Rev. Mus. Paul., **3**, p. 347, 1899—São Paulo; idem, l.c., **4**, p. 162, 1900—Nova Friburgo, Rio de Janeiro; Lönnberg, Ibis, 1903, p. 465—Tatarenda, Bolivian Chaco; Ihering, Cat. Faun. Braz., **1**, p. 86, 1907—São Paulo, Espirito Santo, and Salta; Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 242, 1910 (range in Argentina); Grant, Ibis, 1911, p. 332—Riacho Ancho, Chaco; Bertoni, Faun. Parag., p. 42, 1914—Paraguay; Arribálzaga, El Hornero, **2**, p. 93, 1920—Chaco Argentino.

Geranospizias gracilis Salvadori, Boll. Mus. Zool. Torino, **12**, No. 292, p. 30, 1897—Caiza, Bolivian Chaco; Lillo, Anal. Mus. Nac. Buenos Aires, **8**, p. 203, 1902—Burru-yaco (La Ramada) and Graneros, Tucumán; Bruch, Rev. Mus. La Plata, **11**, p. 251, 1904—Orán, Salta; Lillo, Rev. Letr. Cienc. Soc., **13**, No. 3, p. 61, 1905—Burru-yaco and Graneros, Tucumán; Swann, Syn. Accip., p. 28, 1921—Brazil, Bolivia, Paraguay, and Argentina.

Geranospiza caerulescens gracilis Ihering, Cat. Faun. Braz., **1**, p. 87, 1907—Minas Geraes, Brazil, and Paraguay; Hellmayr, Nov. Zool., **28**, p. 177, 1921—Corrientes and Santa Cruz de la Sierra, Bolivia (crit.; hab. in part); Giacomelli, El Hornero, **3**, p. 77, 1923—La Rioja; Naumburg, Bull. Amer. Mus. N. H., **60**, p. 105, 1930—Puerto Pinasco, Paraguay, and Matto Grosso; Laubmann, Wiss. Erg. Deuts. Gran Chaco Exp., Vögel, p. 99, 1930—Lapango, Formosa, and La Crecencia (Santa Cruz), Bolivia; Stone and Roberts, Proc. Acad. Nat. Sci. Phila., **86**, p. 373, 1934—Descalvados, Matto Grosso; Pinto, Rev. Mus. Paul., **20**, p. 50, 1936—Rio das Almas (Jaraguá), Goyáz.

Geranospizias caerulescens gracilis Swann, Syn. List Accip., p. 17, 1919—Brazil and Paraguay.

Range.—Southern Brazil, from Minas Geraes, southern Goyáz, and Matto Grosso south to Rio Grande do Sul; eastern Bolivia; Paraguay; northern Argentina south to La Rioja, Santa Fé, and Corrientes.

Field Museum Collection.—11: Paraguay (195–265 km. west of Puerto Casado, 9; 30 km. west of Puerto Casado, 1; Puerto Casado, 1).

Family PANDIONIDAE.[1] Ospreys

Genus **PANDION** Savigny

Pandion Savigny, Descr. de l'Egypte, Hist. Nat., **1**, pp. 69, 95, 1809—type, by monotypy, *Pandion fluvialis* Savigny=*Falco haliaetus* Linnaeus.

Balbusardus Fleming, Hist. Brit. Anim., p. 51, 1828—substitute name for *Pandion* Savigny.

*Pandion haliaetus carolinensis Gmelin. OSPREY.

Falco Haliaetos γ. carolinensis Gmelin, Syst. Nat., **1**, (1), p. 263, 1788—based on "Falco piscator Antillarum" Brisson, Orn. (Lugd. Bat.), **1**, p. 105 (ex "Pecheur" Du Tertre) and "Fishing piscator Caroliniensis" Brisson, l.c., p. 105 (ex "Fishing Hawk" Catesby, Nat. Hist. Carolina, **1**, p. 2, pl. 2), South Carolina (ex Catesby) accepted as type locality.

Falco Haliaetos δ. cayennensis Gmelin, Syst. Nat., **1**, (1), p. 263, 1788—based on "Cayenne Osprey" Latham, Gen. Syn. Bds., **1**, (1), p. 263, Cayenne (type in coll. of Miss Blomefield).[2]

Falco haliaetus (not of Linnaeus) Wied, Beitr. Naturg. Bras., **3**, (1), p. 73, 1830—Rio Belmonte, Bahia, Brazil.

Pandion haliaetus Burmeister, Syst. Uebers. Th. Bras., **2**, (1), p. 57, 1855—Brazil; Taylor, Ibis, 1864, p. 79—near Port of Spain, Trinidad; Pelzeln, Orn. Bras., **1**, p. 4, 1867—Matto Grosso (Caicara, Oct.) and Amazonia (Rio Takutu, March; Barra do Rio Negro, 3 Sept.), Brazil; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 449, 1874—part, North and South America; Taczanowski, Proc. Zool. Soc. Lond., 1877, p. 745—Santa Lucia, Tumbez, Peru; idem, Orn. Per., **1**, p. 127, 1884—Peru (Huacho, Lima; Tumbez); Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 39, 1897—part, North and Central America (excepting Cays off British Honduras); Philippi, Anal. Mus. Nac. Chile, **15**, p. 4, 1902—Paine, O'Higgins, Chile; Snethlage, Bol. Mus. Goeldi, **8**, p. 142, 1914—Fazenda Peso São José, Marajó, Brazil; Gifford, Proc. Calif. Acad. Sci., (4), **2**, p. 193, 1919—Albemarle and Chatham Islands, Galapagos; Dugand, Rev. Acad. Colomb. Cienc., Bogotá, **4**, p. 397, pl. 1, fig. 8, pl. 6, fig. 33, 1941—Colombia.

Pandion carolinensis Léotaud, Ois. Trinidad, p. 15, 1866—Trinidad; Chubb, Bds. Brit. Guiana, **1**, p. 281, 1916—Barima, Abary, and Waimi rivers.

[1] About relationship, cf. Compton (Univ. Calif. Pub. Zool., **42**, pp. 173–212, 1938), who regards the Osprey as constituting a separate family within the suborder Cathartae.

[2] *Falco americanus* (not of Boddaert, 1783) Gmelin (Syst. Nat., **1**, (1), p. 257, 1788), based on "Black-chested Eagle" Pennant (Brit. Zool., **2**, p. 196—"North America"), can hardly refer to the Osprey, this bird being described as about the size of the Golden Eagle and having the head and breast deep ash-color and the belly black.

Pandion haliaetus var. *carolinensis* Baird, Brewer and Ridgway, Hist. N. Amer. Bds., **3**, p. 184, 1874 (monog.); Lawrence, Bull. U. S. Nat. Mus., **4**, p. 38, 1876—Tehuantepec (Chihuitan) and Ventosa Bay, Oaxaca, Mexico; Sumichrast, La Naturaleza, **5**, p. 237, 1881—both coasts of Mexico.

Pandion haliaetus carolinensis Berlepsch, Journ. Orn., **35**, p. 28, 1887—Lambare, Paraguay; Nelson, N. Amer. Fauna, **14**, p. 39, 1899—Tres Marias Islands, off Mexico; Berlepsch and Hartert, Nov. Zool., **9**, p. 115, 1902—Caicara, Orinoco, Venezuela; Clark, Proc. Bost. Soc. N. H., **32**, p. 243, 1905—St. Vincent, Grenadines and Grenada (visitor); Ihering, Cat. Faun. Braz., **1**, p. 100, 1907 (range); Bangs, Auk, **24**, p. 290, 1907—Barranca de Puntarenas, Costa Rica (Aug. 12); Berlepsch, Nov. Zool., **15**, p. 294, 1908—Cayenne (no definite record); Carriker, Ann. Carnegie Mus., **6**, p. 472, 1910—same locality; Ingram, Zoologist, 1913, p. 254—Gulf of Paria, Trinidad; Bertoni, Faun. Parag., p. 44, 1914—Asuncion, Paraguay; Cherrie, Sci. Bull., Mus. Brookl. Inst., **2**, p. 348, 1916—Caicara, Orinoco, Venezuela (March 10); Dabbene, Bol. Soc. Physis, **3**, p. 91, 1917—Rio Gastona, Concepción, Tucumán; Swann, Syn. List Accip., p. 163, 1920 (range); idem, Auk, **38**, p. 364, 1921—Culata (Mar. 14) and Montanas Sierra (Oct. 24), Merida, Venezuela; idem, Syn. Accip., p. 232, 1922 (range); Todd and Carriker, Ann. Carnegie Mus., **14**, p. 164, 1922—Bonda, Colombia (Oct. 17, 1899); Barbour, Mem. Nutt. Orn. Cl., **6**, p. 51, 1923—Cuba, in part (visitor); Chapman, Bull. Amer. Mus. N. H., **55**, p. 243, 1926—Chone, Ecuador (December) and Reloncavi Fjord, east of Puerto Montt, Llanquihue, Chile (Jan., 1924); Grinnell, Univ. Calif. Pub. Zool., **32**, p. 113, 1929—Lower California; Naumburg, Bull. Amer. Mus. N. H., **60**, p. 114, 1930—Matto Grosso; Swarth, Occ. Pap., Calif. Acad. Sci., **18**, p. 52, 1931—Cocos Island (Sept. 7) and South Albemarle (Nov. 2), Galapagos Islands; Peters, Bds. World, **1**, p. 275, 1931 (range); Griscom, Bull. Amer. Mus. N. H., **64**, p. 165, 1932—Guatemala; Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **19**, p. 291, 1932—Chile (Paine); Belcher and Smooker, Ibis, 1934, p. 593—Trinidad and Tobago (winter visitor, Dec. to April); Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 460, 1936—Tucumán, Argentina; Bent, Bull. U. S. Nat. Mus., **167**, p. 352, 1937 (life hist.); Pinto, Rev. Mus. Paul., **23**, p. 549, 1938—Manacapuru, Amazonas (Sept.), and Torres, Rio Grande do Sul, Brazil; idem, l.c., **22**, p. 83, 1938—Manacapuru; Dickey and van Rossem, Field Mus. Nat. Hist., Zool. Ser., **23**, p. 130, 1938—El Salvador; Swann, Monog. Bds. Prey, **2**, p. 481, 1945 (monog.); van Rossem, Occ. Pap., Mus. Zool. Louisiana State Univ., **21**, p. 61, 1945—Sonora (distr.); Cooke, Bd. Banding, **16**, p. 106, 1945—Guapi, Cauca, Colombia (banded Gardiner Island, New York).

Range.—Breeds from northwestern Alaska, northwestern Mackenzie, southern Ungava and Newfoundland south to Lower California, western Mexico and the Gulf coast of the United States; winters from the southern United States through Mexico, Central America and the West Indies to Chile (Paine, O'Higgins; east of Puerto Montt, Llanquihue), Paraguay (Asuncion; Lambare),

northern Argentina (Rio Gastona, Concepción, Tucumán), and Brazil (Rio Grande do Sul).[1]

Field Museum Collection.—45: Alaska (Takotna, 1); British Columbia (Okanagan, 2); California (San Clemente Island, 1); Texas (Nueces County, 1; San Patricio County, 1); Labrador (Kegaska, 2); Massachusetts (South Chatham, 1); Connecticut (Guilford, 2; East Haven, 1; New Haven, 4; West Haven, 1; Stamford, 1); New York (Shelter Island, 1); Florida (New River, 3; Miami Beach, 1; Amelia Island, 1; Palm Beach County, 2; Enterprise, 3; East Pass, 3); Virgin Islands (St. Croix, 2); Mexico (San Luis Island, Lower California, 1); Panama (Port Obaldia, Darien, 1); Colombia (Popayán, Cauca, 1; Morelia, Caqueta, 1); Venezuela (Encontrados, Zulia, 1); Brazil (Lago Baptista, Amazonas, 3; Obidos, Pará, 1); Peru (Yarinacocha, Rio Ucayali, 2).

***Pandion haliaetus ridgwayi** Maynard.[2] BAHAMAN OSPREY.

Pandion Ridgweir (sic) Anonymous (=C. J. Maynard), Amer. Exch., Mart, and Household Journ., 3, No. 3, p. 33, Jan. 15, 1887—Andros Island, Bahamas (type in coll. of C. J. Maynard, subsequently in coll. of Gerrit S. Miller, now in the British Museum, examined).

Pandion ridgwayi Maynard, Amer. Exch., Mart, and Household Journ., 3, No. 6, p. 69, Feb. 5, 1887 (name and description corrected).

Pandion carolinensis (not *Falco haliaetus* γ. *carolinensis* Gmelin) Bruant, Proc. Bost. Soc. N. H., 7, p. 105, 1859—Water Cay, Ragged Islands, Bahamas (crit.; nest descr.); Salvin, Ibis, 1864, pp. 378, 385—Saddle Cay, Half Moon Cay, and Tobacco Cay, off British Honduras; Bonhote, Ibis, 1903, p. 297—Andros (crit.; plumages; nest).

[1] In addition to a large North American series, unequivocal specimens of *carolinensis* have been examined from the following localities: Holbox Island, Yucatan, 1 (Dec., 1885); Belize, British Honduras, 1 (Dec. 14); Ruatan Island, off Honduras (no date); Acepam, Pacific coast of Guatemala, 2; Alvarado, Vera Cruz, Mexico, 1 (Nov.); Rupununi River, British Guiana, 1 (Dec. 18, 1889); Barima River, British Guiana, 2; Caicara, Matto Grosso, Brazil and Abary River (Nov.).

[2] *Pandion haliaetus ridgwayi* Maynard differs from *P. h. carolinensis* by the reduction or even complete absence of the dusky streaks on crown, side of head, and chest. The type and an adult male from Inagua show just a few tiny specks of dusky in the middle of the forecrown and on the auriculars, while the breast is wholly unmarked. Another bird from Andros, however, has some criniform streaks on the chest; the forecrown is striped with dusky, though much more narrowly so than in *carolinensis* and there is a series of dusky (white-edged) streaks running from the auriculars down the sides of the neck, suggesting the broad, solidly blackish brown band of the North American Osprey. Two young birds, one from Andros, the other from Half Moon Cay, are much less streaked on the crown than *carolinensis* and have merely a few dusky spots on the auriculars. While *ridgwayi* seems to be a fairly well-marked race, it should be mentioned that even North American specimens sometimes have the breast unspotted.

Additional material examined.—Bahama Islands: Andros, 3; Inagua, 1.—British Honduras: Half Moon Cay, 1 (British Museum).

Pandion haliaetus ridgwayi Allen, Auk, **22**, p. 354, 1905—Long Island, Bahama Islands; Riley, in Shattuck, The Bahama Islands, p. 362, 1905—New Providence, Andros, Water Cay (Ragged Islands), Long Island, Acklin, North Caicos, South Caicos, East Caicos and Great Inagua; Swann, Syn. Accip., p. 232, 1922—Bahama Islands (crit.); Griscom, Amer. Mus. Nov., **235**, p. 13, 1926—Hicks Cay, off British Honduras (breeding; crit.); Peters, Bds. World, **1**, p. 271, 1931 (range); Wetmore and Swales, Bull. U. S. Nat. Mus., **155**, p. 117, 1931—near Cape Engano, Hispaniola; Swann, Monog. Bds. Prey, **2**, p. 482, 1945 (monog.).

Range.—Resident in the Bahama Islands, on the Cays off British Honduras (Saddle Cay, Half Moon Cay, Tobacco Cay, Hicks Cay) and probably on the Cays of Cuba;[1] also recorded near Cape Engano, Hispaniola (Feb. 17, 1928).

Field Museum Collection.—6: British Honduras (Glover's Reef, Middle Cay, 1; Half Moon Cay, 1); Bahama Islands (Bird Rock, Acklin, 1; Caicos, 2; Mathewstown, Inagua, 1).

Family FALCONIDAE. Falcons

Subfamily HERPETOTHERINAE. Laughing Hawks

Genus **HERPETOTHERES** Vieillot[2]

Herpetotheres Vieillot,[3] Nouv. Dict. Hist. Nat., nouv. éd., **18**, p. 317, Dec. 27, 1817—type, by subs. desig. (Gray, List. Gen. Bds., p. 3, 1840), *Falco cachinnans* Linnaeus.

Cachinna Fleming, Phil. Zool., **2**, p. 236, 1822—type, by monotypy, *Falco cachinnans* Linnaeus.

Macagua Lesson, Traité d'Orn., livr. 1, p. 68, Feb., 1830—type, by tautonymy, "Macagua" Azara=*Falco cachinnans* Linnaeus.

*Herpetotheres cachinnans cachinnans (Linnaeus). LAUGHING HAWK.

Falco cachinnans Linnaeus, Syst. Nat., 10th ed., **1**, p. 90, 1758—ex Rolander's manuscript, "South America"=Surinam (as designated by Berlepsch, Nov. Zool., **15**, p. 290, 1908); Schomburgk, Reisen Brit. Guiana, **1**, p. 394, 1847—Pirara.

[1] There can be little doubt that the Ospreys found breeding on the Cays off Cuba by Gundlach and recorded as *P. carolinensis* (Journ. Orn., **2**, "1854," Erinnerungss., p. lxxx, 1855; in Poey, Repert. Hist. Nat., **1**, p. 222, 1865; Journ. Orn., **19**, p. 368, 1871) belonged to *P. h. ridgwayi*.

[2] About osteological characters and affinities, cf. Sushkin, Nouv. Mém. Soc. Imp. Natur. Moscou, **16**, livr. 4, pp. 207, 217, 1905.

[3] *Physeta* Vieillot (Anal. Nouv. Orn. Élém., p. 24, April, 1816) created for *Falco sufflator* Linnaeus (Syst. Nat., 10th ed., **1**, p. 90, 1758—ex Rolander MS., Surinam), although sometimes referred here, seems to be unidentifiable.

Herpetotheres cachin(n)ans Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **18**, p. 317, 1817—Paraguay (ex Azara, No. 15) and Cayenne (descr.); idem and Oudart, Gal. Ois., **1**, (1), p. 47, pl. 19, 1820—Cayenne; Cabanis, in Schomburgk, Reisen Brit. Guiana, **3**, "1848," p. 738, 1849—British Guiana; Burmeister, Syst. Uebers. Th. Bras., **2**, (1), p. 90, 1855—Brazil; Sclater, Proc. Zool. Soc. Lond., **23**, p. 134, 1855—Bogotá and Santa Marta, Colombia; Sclater, l.c., **25**, p. 201, 1857—Jalapa, Mexico; Moore, l.c., **27**, p. 52, 1859—Omoa, Honduras; Sclater, l.c., pp. 368, 389, 1859—Jalapa, Vera Cruz, and Playa Vicente, Oaxaca; Sclater and Salvin, Ibis, 1859, p. 215—Chimalapa and La Grande, Guatemala; Lawrence, Ann. Lyc. Nat. Hist. N. Y., **7**, p. 289, 1861—Panama Railroad; Pelzeln, Orn. Bras., **1**, p. 7, 1867—Bõa Vista (Goyáz), Avuaçu and Caiçara (Matto Grosso), Borba (Rio Madeira), Barra do Rio Negro, and Villa de Tapajóz [=Santarém], Brazil; Sclater and Salvin, Proc. Zool. Soc. Lond., 1867, pp. 590, 753—Mexiana, Brazil, and Yurimaguas, Peru; Lawrence, Ann. Lyc. Nat. Hist. N. Y., **9**, p. 132, 1868—Costa Rica; Frantzius, Journ. Orn., **17**, p. 367, 1869—Costa Rica; Sumichrast, Mem. Bost. Soc. N. H., **1**, p. 560, 1869—Vera Cruz (hot region); Sclater and Salvin, Proc. Zool. Soc. Lond., 1869, p. 629—San Estéban, Carabobo, Venezuela; Salvin, l.c., 1870, p. 214—Boquete de Chitrá and Calóbre, Veraguas; Sclater and Salvin, l.c., p. 838—Honduras; iidem, l.c., 1873, p. 302—Yurimaguas, Peru; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 278, 1874 (descr.); Lawrence, Mem. Bost. Soc. N. H., **2**, p. 300, 1874—Mazatlan, Sinaloa; idem, Bull. U. S. Nat. Mus., **4**, p. 41, 1876—Tehuantepec and Tapana, Oaxaca; Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, p. 137, 1876 (monog.); Sclater and Salvin, Proc. Zool. Soc. Lond., 1879, p. 541—Cauca and Remedios, Antioquia, Colombia; iidem, l.c., p. 638—Bolivia (d'Orbigny's localities); Forbes, Ibis, 1881, p. 353—Aguas Bellas, Pernambuco; Sumichrast, La Naturaleza, **5**, p. 237, 1881—both coasts of Mexico (up to 1,000 meters el.); Taczanowski, Orn. Pér., **1**, p. 145, 1884—part, Yurimaguas and Marañón Valley, Peru; Nutting, Proc. U. S. Nat. Mus., **6**, p. 389, 1884—Sucuyá, Nicaragua; Salvin, Ibis, 1886, p. 77—British Guiana (ex Schomburgk); Ferrari-Perez, Proc. U. S. Nat. Mus., **9**, p. 168, 1886—Chietla, Puebla, and Santa Ana, Vera Cruz, Mexico; Kerr, Ibis, 1892, pp. 142, 152—near Fortín Page, lower Pilcomayo; Richmond, Proc. U. S. Nat. Mus., **16**, p. 521, 1893—Rio Escondido, Nicaragua; Chapman, Bull. Amer. Mus. N. H., **8**, p. 286, 1896—Chichen Itzá, Yucatan; Salvadori, Boll. Mus. Zool. Torino, **12**, No. 292, p. 29, 1897—Caiza, Bolivia; Lantz, Trans. Kans. Acad. Sci., **16**, p. 219, 1899—Naránjo, Guatemala; Allen, Bull. Amer. Mus. N. H., **13**, p. 131, 1900—Bonda, Santa Marta, Colombia; Salvadori, Boll. Mus. Zool. Torino, **15**, No. 378, p. 13, 1900—Urucúm, Matto Grosso; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 112, 1901—Mexico to Panama Railroad; Bangs, Proc. New Eng. Zool. Cl., **3**, p. 20, 1902—Bogaba, Chiriquí; Ménégaux, Bull. Mus. Hist. Nat. Paris, **10**, p. 108, 1904—French Guiana; Dearborn, Field Mus. Nat. Hist., Orn. Ser., **1**, p. 82, 1907—Los Amates and Mazatenango, Guatemala; Ihering, Cat. Faun. Braz., **1**, p. 95, 1907—Fazenda da Faya, Matto Grosso; Hagmann, Zool. Jahrb. (Syst.), **26**, p. 22, 1907—Mexiana Island, Brazil; Snethlage, Journ. Orn., **56**, p. 22, 1908—Bom Lugar, Rio Purús; Berlepsch, Nov. Zool., **15**, p. 290, 1908—Cayenne; Carriker, Ann. Carnegie

Mus., **6**, p. 466, 1910—Costa Rica (Guácimo, Rio Sícsola, and El Hogar); Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 247, 1910 (range in Argentina); Reiser, Denks. Math.-Naturw. Kl. Akad. Wiss. Wien, **76**, p. 89, 1910—Bahia (Barrinha, Rio Preto), Piauhy (Pedrinha; Serra da Prata; Bõa Vista, near Brejão), and Maranhão (Remanso de Coco, Rio Parnahyba); Hellmayr, Nov. Zool., **17**, p. 413, 1910—Borba, Rio Madeira; idem, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **26**, No. 2, p. 121, 1912—Mexiana; Stone, Proc. Acad. Nat. Sci. Phila., **65**, p. 195, 1913—Pedernales, Orinoco Delta, Venezuela; Peters, Auk, **30**, p. 371, 1913—Santa Lucia and Camp Mengel, Quintana Roo; Bertoni, Faun. Parag., p. 43, 1914—Paraguay; Snethlage, Bol. Mus. Goeldi, **8**, p. 137, 1914—Marajó (Pacoval), Mexiana, and Rio Purús (Bom Lugar), Brazil; Chubb, Bds. Brit. Guiana, **1**, p. 261, 1916—Upper Takutu Mountains, Essequibo, Abary River, Pirara, and Georgetown; Stone, Proc. Acad. Nat. Sci. Phila., **80**, p. 154, 1928—Rio Inhangapy, Pará; Van Tyne, Misc. Pub., Mus. Zool. Univ. Mich., **27**, p. 17, 1935—Uaxactun, Petén, Guatemala; Sassi, Temminckia, Leiden, **3**, p. 301, 1938 (races in Costa Rica).

Astur cachinnans Spix, Av. Spec. Nov. Bras., **1**, p. 8, pl. 3a, 1824—Bahia, Minas Geraes, and Pará, Brazil; Schlegel, Mus. Pays-Bas, Astures, p. 26, 1862—Surinam.

Macagua cachinnans d'Orbigny, Voy. Amér. Mérid., Ois., p. 96, 1835—Santa Cruz de la Sierra, Moxos, and Chiquitos, Bolivia; Dugand, Rev. Acad. Colomb. Cienc., Bogotá, **4**, p. 397, pl. 1, fig. 2, pl. 5, fig. 30, 1941—Colombia; Sheffler and van Rossem, Auk, **61**, p. 140, 1944—Guirocoba, Sonora (nesting).

Cachinna herpetotheres Gray, Gen. Bds., **1**, livr. 13, p. [15], pl. 7, fig. 4, May, 1845—based on Vieillot, Gal. Ois., pl. 19, and Spix, Av. Bras., **1**, pl. 3a.

Herpetotheres cachinnans fulvescens (not of Chapman) Cherrie, Sci. Bull., Mus. Brookl. Inst., **2**, p. 345, 1916—Orinoco Delta.

Herpetotheres cachinnans cachinnans Chapman, Bull. Amer. Mus. N. H., **36**, p. 248, 1917—Rio Frio (Cauca), Honda (Magdalena), Villavicencio and Barrigon (eastern foot of eastern Andes), Colombia; Bangs and Penard, Bull. Mus. Comp. Zool., **62**, p. 37, 1918—vicinity of Paramaribo, Surinam; Swann, Syn. List Accip., p. 75, 1920 (range); idem, Syn. Accip., p. 123, 1922 (range); Todd and Carriker, Ann. Carnegie Mus., **14**, p. 157, 1922—Bonda, Neguange, Don Diego, and Fundación, Santa Marta region, Colombia; Chapman, Bull. Amer. Mus. N. H., **55**, p. 236, 1926—Huilca (Macas region), eastern Ecuador; Kennard and Peters, Proc. Bost. Soc. N. H., **38**, p. 450, 1928—Almirante, Panama; Peters, Bull. Mus. Comp. Zool., **71**, p. 308, 1931—Cricamola and Almirante, Panama; Darlington, l.c., p. 368, 1931—Rio Frio, Magdalena, Colombia; Peters, Bds. World, **1**, p. 276, 1931 (in part); Swann, Monog. Bds. Prey, **2**, p. 127, 1933 (range); Griscom, Bull. Mus. Comp. Zool., **75**, p. 374, 1934—Coyucá, Guerrero; idem, l.c., **78**, p. 301, 1935—Panama (local distr.); Aldrich, Sci. Pub. Cleveland Mus. N. H., **7**, p. 49, 1937—Paracoté, Azuero Peninsula, Panama.

Herpetotheres cachinnans chapmani Bangs and Penard, Bull. Mus. Comp. Zool., **62**, p. 37, April, 1918—Quintana Roo, Mexico (type in Museum of Comparative Zoology, Cambridge, Mass.); Swann, Syn. List Accip.,

p. 75, 1920—Mexico; idem, Syn. Accip., p. 124, 1922—Mexico to northern Nicaragua; Griscom, Amer. Mus. Nov., **235**, p. 12, 1926—Quintana Roo; Peters, Bull. Mus. Comp. Zool., **69**, p. 418, 1929—Progreso, Honduras; idem, Bds. World, **1**, p. 276, 1931—Mexico to Canal Zone; Stone, Proc. Acad. Nat. Sci. Phila., **84**, p. 300, 1932—Cantarranas, Honduras; Swann, Monog. Bds. Prey, **2**, p. 130, 1933 (monog.); Traylor, Field Mus. Nat. Hist., Zool. Ser., **24**, p. 203, 1941—Pacaitun, Campeche.

Herpetotheres cachinnans maestus Bangs and Noble, Auk, **35**, p. 444, Oct., 1918—Bella Vista, Marañón River, Peru (type in Museum of Comparative Zoology, Cambridge, Mass.); Swann, Syn. Accip., p. 124, 1922 (range); Peters, Bds. World, **1**, p. 276, 1931 (range); Swann, Monog. Bds. Prey, **2**, p. 129, 1933—Peru.

Herpetotheres cachinnans queribundus Bangs and Penard, Bull. Mus. Comp. Zool., **63**, p. 23, June, 1919—Pernambuco, Brazil (type in Museum of Comparative Zoology, Cambridge, Mass.); Swann, Syn. Accip., p. 124, 1922—Brazil to Paraguay; Wetmore, Bull. U. S. Nat. Mus., **133**, p. 98, 1926—Chaco (Las Palmas), Formosa (Riacho Pilaga), and Paraguay (west of Puerto Pinasco); Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **12**, p. 453, 1929—Piauhy; Naumburg, Bull. Amer. Mus. N. H., **60**, p. 111, 1930—Matto Grosso; Laubmann, Wiss. Erg. Deuts. Gran Chaco Exp., Vögel, p. 95, 1930—La Crecencia and Las Taperas, Santa Cruz, Bolivia; Peters, Bds. World, **1**, p. 276, 1931 (range); Griscom, Bull. Amer. Mus. N. H., **64**, p. 159, 1932—Progreso, La Carolina, Finca El Cipres, Hac. California, and Virginia Plantation, Guatemala (crit.); Swann, Monog. Bds. Prey, **2**, p. 128, 1933 (monog.); Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 461, 1936—Formosa, Chaco, and Misiones; Pinto, Rev. Mus. Paul., **20**, p. 53, 1936—Rio das Almas, Jaraguá, Goyáz; Brodkorb, Occ. Pap., Mus. Zool. Univ. Mich., **349**, p. 2, 1937—Caviana Island, Brazil; Pinto, Rev. Mus. Paul., **22**, p. 84, 1938—Maranhão (Bõa Vista), Minas Geraes (Pirapora), São Paulo (Ituverara), Goyáz (Rio das Almas), and Matto Grosso (Rio Paraná, São Luiz de Caceras); Bond and de Schauensee, Proc. Acad. Nat. Sci. Phila., **95**, p. 178, 1943—vicinity of Santa Cruz, Bolivia; Gyldenstolpe, K. Svensk. Vetensk. Akad. Handl., (3), **22**, p. 28, 1945—João Pessõa, Rio Juruá, Brazil (disc.); idem, l.c., **23**, p. 54, 1945—Cachuela Esperanza, El Beni, Bolivia.

Herpetotheres cachinnans excubitor van Rossem, Trans. San Diego Soc. Nat. Hist., **9**, p. 10, Nov. 21, 1938—Volcan de Colima, Jalisco, Mexico (type in British Museum examined); idem, Occ. Pap., Mus. Zool. Louisiana State Univ., **21**, p. 61, 1945—Guirocoba, Sonora (breeding), footnote (crit.).

Range.—Mexico from southern Sonora, Sinaloa (Mazatlan), and San Luis Potosí (Valles) south to the Canal Zone and south and east through Colombia (east of the western Andes), Venezuela, the Guianas, and Brazil to eastern Ecuador, eastern Peru, eastern Bolivia, Matto Grosso, São Paulo, Paraguay, and the Argentine Chaco.[1]

[1] With upwards of seventy specimens from the whole range before us, we are quite unable to correlate the various characters, which have been used for the discrimination of local races, with particular geographic areas. Griscom (Bull. Amer. Mus. N. H., **67**, pp. 159–160; Bull. Mus. Comp. Zool., **69**, p. 158) has al-

Field Museum Collection.—42: Mexico (Valles, San Luis Potosí, 1; Pacaitun, Campeche, 2; San Felipe, Yucatan, 1); El Salvador (Divisadero, Morazan, 1); Guatemala (Concepción del Mar, Escuintla, 1; Los Amates, Izabal, 1); Honduras (Tegucigalpa, 1; Monte Redondo, 1); Nicaragua (San Emilio, Rivas, 1); Colombia, Caquetá (Morelia, 1; Belén, 1); Venezuela, Zulia (Encontrados, 2; Rio Aurare, 1); British Guiana (Hyde Park, Demerara River, 1; Buxton, 1); Brazil (Canutama, Rio Purús, 3; Labrea, Rio Purús, 2; Lago do Baptista, Amazonas, 2; Igarape Aniba, Amazonas, 4; Itacoatiara, Rio Amazonas, 1; Obidos, Pará, 1; Rio São Miguel, Goyaz, 1); Bolivia, Santa Cruz (Buena Vista, 3; Cercado, 1; Nueva Moka, 1; Rio Surutu, 1; San Carlos, 1); Paraguay (195 km. west of Puerto Casado, 2; Horqueta, 1); Argentina (Resistencia, Chaco, 1).

***Herpetotheres cachinnans fulvescens** Chapman.[1] FULVESCENT LAUGHING HAWK.

ready called attention to the erratic nature of this hawk's variation and we can but corroborate his contention that neither *chapmani* nor *maestus* nor *queribundus* can be properly separated. Birds from Mexico and Central America, in general, are perhaps a slight shade paler brown above, but as this holds only in a small percentage, there is no justification in maintaining the form *chapmani*. Two adults from Bella Vista, Peru (*maestus*), in the American Museum of Natural History we found identical with others from Guiana, and one from Yurimaguas is not different either. In a series from eastern Brazil, Bolivia, and Paraguay (*queribundus*) only two or three are paler brown above, closely approaching therein several from Mexico, while the remaining birds can be matched by Guianan individuals picked at random. The lightest, nearly whitish, under parts in the entire lot are possessed by an adult from Remedios, Colombia, whereas the crown-streaks are broadest in a female from British Guiana (Annai), the ground color of its pileum being at the same time fully as deep antimony yellow as in *fulvescens* from Pacific Colombia. The dusky spotting of the under wing coverts is an exceedingly variable feature, birds with heavy or slight spotting and others with plain under coverts being found alike in Central America, British Guiana, and Brazil. Size varies a good deal individually, the three largest birds with wings over 300 mm. being from Colima, Jalisco (Beltran), and Nicaragua (Matagalpa). As pointed out by Griscom, pale-bellied individuals and others with deep buff under parts occur side by side over the whole range.

Additional material examined.—Mexico: Volcan Colima, Colima, 1; Beltran, Jalisco, 1; Vega del Casadero, Vera Cruz, 1; Vera Cruz, 1; Playa Vicente, Oaxaca, 1; Teapa, Tabasco, 1; Tonalá, Chiapas, 1; Yucatan, 2.—Guatemala: Chimalapa, 1; Choctum, 1; Capetillo, 1; Escuintla, 2; Retalhuleu, 1.—British Honduras: Western District, 2.—Honduras: unspecified, 1.—Nicaragua: Chontales, 1; Rio Escondido, 2; Matagalpa, 2; San Emilio, Lake Nicaragua, 1.—Costa Rica: unspecified, 1.—Panama: Boquete de Chitrá, Veraguas, 1.—Colombia: Remedios, 1; Santa Marta, 1.—Ecuador: Sarayacu, 2.—Peru: Bella Vista, 2; Yurimaguas, 1.—Venezuela: Montañas Limones (alt. 150 ft.), Mérida, 1.—British Guiana: Annai, 1; Demerara, 2; Essequibo River, 1; Upper Takutu Mountains, 1; Abary River, 1.—French Guiana: Cayenne, 1.—Brazil: Obidos, 2; Mexiana Island, 1; Rio Preto, Bahia, 1; Bahia, 1; southern Piauhy, 3; Santarém, 1; Borba, Rio Madeira, 1; Caiçara, Matto Grosso, 1.—Bolivia: La Crecencia, Santa Cruz, 1; Esperanza, 1.—Argentina: Fortín Page, lower Pilcomayo, 1.

[1] *Herpetotheres cachinnans fulvescens* Chapman: Similar to the nominate race, but on average smaller; dorsal surface slightly darker; crown and under parts generally more saturated, rich clay color. Wing, 250–260.

Herpetotheres cachinnans fulvescens Chapman, Bull. Amer. Mus. N. H., **34**, p. 638, Dec. 30, 1915—Alto Bonito, Rio Sucio, Colombia (type in the American Museum of Natural History, New York); idem, l.c., **36**, p. 249, 1917—Alto Bonito, San José, and Barbacoas, Pacific Colombia; Swann, Syn. List Accip., p. 75, 1920; idem, Syn. Accip., p. 124, 1922—western Ecuador to "Nicaragua"; Chapman, Bull. Amer. Mus. N. H., **55**, p. 236, 1926—Rio de Oro, Puná Island, Bucay, and Chongoncito, Ecuador; Griscom, Bull. Mus. Comp. Zool., **69**, p. 158, 1929—Cana, Darien; Swann, Monog. Bds. Prey, **2**, p. 130, 1933—western Ecuador to Panama; Griscom, Bull. Mus. Comp. Zool., **78**, p. 301, 1935—Pacific slope of Darien.

Herpetotheres cachinnans (not *Falco cachinnans* Linnaeus) Sclater, Proc. Zool. Soc. Lond., **28**, pp. 288, 298, 1860—Babahoyo and Esmeraldas, Ecuador; Taczanowski, l.c., 1877, p. 329—Lechugal, Tumbez, Peru; idem, Orn. Pér., **1**, p. 145, 1884—part, Lechugal; Hartert, Nov. Zool., **5**, p. 502, 1898—Paramba, Ecuador; Hellmayr, Proc. Zool. Soc. Lond., 1911, p. 1204—Novitá, Pacific Colombia.

Herpetotheres cachinnans cachinnans Peters, Bds. World, **1**, p. 276, 1931—part, eastern Panama to southwestern Ecuador.

Range.—Humid Tropical zone of eastern Darien (Pacific slope), Pacific Colombia, and western Ecuador to the Peruvian boundary (Lechugal, Prov. Tumbez).[1]

Field Museum Collection.—5: Ecuador (Montes de Achotal, Esmeraldas, 1; San Mateo, Esmeraldas, 3; Santo Domingo de los Colorados, Manabi, 1).

Genus MICRASTUR G. R. Gray[2]

Brachypterus (not of Latreille, 1819, nor of Kugelann, 1794) Lesson, Compl. Buffon, **7**, p. 113, 1836—type, by tautonymy, *Falco brachypterus* Temminck=*Sparvius semitorquatus* Vieillot.

Micrastur G. R. Gray, List Gen. Bds., 2nd ed., p. 6, 1841—new name for *Brachypterus* Lesson, preoccupied.

Carnifex (not of Sundevall, 1836) Lesson, Écho du Monde Sav., No. 46, col. 1084, Dec. 15, 1842—type, by orig. desig., *Carnifex naso* Lesson.

Climacocercus Cabanis, Arch. Naturg., **10**, (1), p. 265, 1844—type, by orig. desig., *Falco brachypterus* Temminck.

[1] While not possessing any character by which every single individual may be distinguished, there can be no doubt that birds from the Pacific coast of Colombia and Ecuador are generally more deeply colored, particularly underneath and on the crown. Yet the darkest specimen (an adult female from Condoto) is even exceeded in intensity of coloring by one from Venezuela (Limones, Mérida), while one from Ecuador (Paramba), on the other hand, is nowise separable from the Guianan average.

Additional material examined.—Colombia: Condoto, 2; Nóvita, 1.—Ecuador: Paramba, Imbabura, 2; unspecified, 1.

[2] About anatomical characters and affinities, cf. Sushkin, Nouv. Mém. Soc. Natur. Moscou, **15**, livr. 4, pp. 194, 217, 1905.

Climacourus Bonaparte, Rev. Mag. Zool., (2), **2**, p. 489, 1850 (lapsus for *Climacocercus* Cabanis).

Rhyncomegas Bonaparte, Compt. Rend. Acad. Sci. Paris, **37**, p. 809, 1853—type, by orig. desig., *Falco brachypterus* Temminck.

Rhynchomegus Bonaparte, Rev. Mag. Zool., (2), **6**, p. 537, 1854—emendation of *Rhyncomegas* Bonaparte.

Nothierax Sundevall, Ofv. Vetensk. Akad. Handl., **31**, No. 2, p. 25, 1874—type, by orig. desig., *Falco xanthothorax* Temminck=*Sparvius ruficollis* Vieillot.

Thrasyaccipiter Bertoni, Anal. Cient. Parag., **1**, No. 1, p. 164, Jan., 1901—type, by monotypy, *Thrasyaccipiter seminocturnis* Bertoni=*Sparvius ruficollis* Vieillot.

Clamosocircus Swann, Monog. Bds. Prey, **1**, p. 145, 1925—type, by orig. desig., *Sparvius gilvicollis* Vieillot.

*Micrastur semitorquatus naso (Lesson).[1] MEXICAN HARRIER-HAWK.

Carnifex naso Lesson, Écho du Monde Sav., No. 46, col. 1085, Dec. 15, 1842—Realejo, "république du Centre-Amérique"=Nicaragua (type in coll. of R. P. Lesson); idem, Rev. Zool., **5**, p. 378, 1842 (reprint).

Falco percontator Cabot, Bost. Journ. Nat. Hist., **4**, No. 4, p. 462, Jan. 1844—Chichen-Itzá, Yucatan, Mexico (cotypes in coll. of S. Cabot, now in Museum of Comparative Zoology, Cambridge, Mass.; cf. Bangs, Auk, **32**, p. 168, 1915, and Bull. Mus. Comp. Zool., **70**, p. 186, 1930).

Micrastur semitorquatus (not *Sparvius semitorquatus* Vieillot) Sclater and Salvin, Ibis, 1859, p. 218—Guatemala; Lawrence, Ann. Lyc. Nat. Hist. N. Y., **7**, p. 462, 1862—Lion Hill, Panama; idem, l.c., **9**, p. 134, 1868—La Cruces de Candelaria and Rancho Redondo, Costa Rica; Frantzius, Journ. Orn., **17**, p. 369, 1869—Costa Rica; Sclater and Salvin, Proc. Zool. Soc. Lond., 1869, p. 365—part, Costa Rica, Guatemala, and Yucatan; Salvin, l.c., 1870, p. 216—Mina de Chorcha, Chiriquí; Ridgway, Proc. Bost. Soc. N. H., **16**, p. 76, 1873—part, Central America; Lawrence, Mem. Bost. Soc. N. H., **2**, p. 299, 1874—Mazatlan, Sinaloa (habits); idem, Bull. U. S. Nat. Mus., **4**, p. 40, 1876—Santa Efigenia and Tehuantepec City, Oaxaca, Mexico; Boucard, Proc. Zool. Soc. Lond., 1878, p. 44—Candelaria Mountains, Costa Rica; Sumichrast, La Naturaleza, **5**, p. 235, 1881—tierra caliente of Mexico; Salvadori and Festa, Boll. Mus. Zool. Torino, **14**, No. 339, p. 11, 1899—Laguna della Pita, Darien.

[1] *Micrastur semitorquatus naso* (Lesson) is a very poor race. There does not seem to be anything in the supposedly larger size, but adult birds from Central America seem to be slightly darker, more blackish above, while the juvenile plumage is generally more deeply tinged with buff on the under parts. *M. amaurus*, known from Panama and Ecuador, is merely a melanistic mutation.

Additional material (of adults) examined.—Mexico: Presidio de Mazatlan, Sinaloa, 2; Plain of Colima, Colima, 1; Tehuantepec, Oaxaca, 1.—Guatemala: Retalhuleu, 1.—Salvador: La Libertad, 1.—Nicaragua: San Emilio, 1.—Costa Rica (unspecified), 1.—Panama (unspecified), 1.—Ecuador: near Gualea, 1.

Micrastur brachypterus Taylor, Ibis, 1860, p. 225—Atlantic slope [of Honduras]; Carriker, Ann. Carnegie Mus., **6**, p. 452, 1910—Bolson and Carrillo, Costa Rica.

Nisus brachypterus (not *Falco brachypterus* Temminck) Schlegel, Mus. Pays-Bas, Astures, p. 52, 1862—part, spec. a, Mexico.

Micrastur melanoleucus (not *Sparvius melanoleucus* Vieillot) Ridgway, Proc. Acad. Nat. Sci. Phila., 1875, p. 482—part, Mexico (Colima, Sierra Madre, Mazatlan, Tehuantepec, Mirador) to Costa Rica (Angostura, Rancho Redondo, Sipurio, Talamanca) and Panama; Nutting, Proc. U. S. Nat. Mus., **6**, p. 377, 1883—San Juan del Sur, Nicaragua; Boucard, Proc. Zool. Soc. Lond., 1883, p. 457—Yucatan (ex Cabot); Taczanowski, Orn. Pér., **1**, p. 160, 1884—part, Lechugal, Peru; Cherrie, Anal. Inst. Fís.-Geog. Mus. Nac. Costa Rica, **4**, p. 145, 1893—Boruca, Costa Rica; Richmond, Proc. U. S. Nat. Mus., **18**, p. 628, 1896—Alta Mira, Tamaulipas; Bangs, Proc. New Eng. Zool. Cl., **2**, p. 15, 1900—Loma del Leon, Panama; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 107, 1901—Mexico to Darien; Miller, Bull. Amer. Mus. N. H., **21**, p. 345, 1905—Escuinapa and Juanna Gomez, Sinaloa; Cole, Bull. Mus. Comp. Zool., **50**, p. 121, 1906—Chichen-Itzá, Yucatan; Dearborn, Field Mus. Nat. Hist., Orn. Ser., **1**, p. 83, 1907—San José, Guatemala; Phillips, Auk, **28**, p. 73, 1911—Caballeros, Tamaulipas; W. Sclater, Ibis, 1918, p. 344—part, Central America and Ecuador; Lönnberg and Rendahl, Ark. Zool., **14**, No. 25, p. 33, 1922—below Gualea and Nanegal, Ecuador (crit.).

Micrastur amaurus Gurney, Ibis, (4), **3**, p. 173, April, 1879—forest region of Panama (cotypes in Norwich Museum and in Salvin-Godman Collection, the latter now in the British Museum;=melanistic mutation); Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 109, pl. 65, 1901—Panama.

Micrastur melanoleucus melanoleucus Swann, Syn. List Accip., p. 15, 1919—part, Mexico to Panama; idem, Syn. Accip., p. 24, 1921—part, Mexico to Panama.

Micrastur melanoleucus percontator Swann, Monog. Bds. Prey, **1**, p. 142, 1925—part, Mexico to Panama (monog.).

Micrastur melanoleucus naso Chapman, Bull. Amer. Mus. N. H., **55**, p. 221, 1926—Mindo, Ecuador; Griscom, l.c., **64**, p. 150, 1932—Hacienda California and Finca El Cipres, Guatemala; idem, Bull. Mus. Comp. Zool., **72**, p. 316, 1932—Permé and Obaldia, Panama; Huber, Proc. Acad. Nat. Sci. Phila., **84**, p. 212, 1932—Eden, Nicaragua.

Micrastur semitorquatus percontator Kennard and Peters, Proc. Bost. Soc. N. H., **38**, p. 449, 1928—Almirante Bay, Panama; Bangs and Peters, Bull. Mus. Comp. Zool., **68**, p. 387, 1928—Tapanatepec, Oaxaca.

Micrastur semitorquatus naso Peters, Bds. World, **1**, p. 277, 1931 (range); idem, Bull. Mus. Comp. Zool., **71**, p. 318, 1931—Changuinola and Cricamola, Almirante, Panama; Griscom, l.c., **78**, p. 302, 1935—Panama; Traylor, Field Mus. Nat. Hist., Zool. Ser., **24**, p. 204, 1941—Pacaitun, Campeche, Mexico.

Range.—Tropical zone of Mexico, from Sinaloa and Tamaulipas southward through Central America to eastern Panama, western Ecuador, and the Peruvian boundary (Lechugal, Dept. Tumbez).

Field Museum Collection.—17: Mexico (Esquinapa, Sinaloa, 1; Apatzingan, Michoacan, 1; Pacaitun, Campeche, 1; Chichen Itza, Yucatan, 1); Guatemala, Escuintla (San José, 1; Tiquisate, 1); El Salvador (San Sebastian, La Paz, 1; Laguna Olomega, San Miguel, 1; Sitio del Nino, La Libertad, 1); Nicaragua (San Gerónimo, Chinandega, 1; San Emilio, Rivas, 1); Costa Rica (Boruca, Puntarenas, 1); Panama (Boquete, Chiriqui, 1); Colombia, Choco (Rio Jurado, 2; Sierra Darien, Pacific side, 1; Rio Salaqui, 1).

***Micrastur semitorquatus semitorquatus** (Vieillot). COLLARED HARRIER-HAWK.

Sparvius semi-torquatus Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **10**, p. 322, 1817—based on "Esparvero faxado" Azara, No. 19, Paraguay (descr. of young).[1]

Sparvius melanoleucus Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **10**, p. 327, 1817—based on "Esparvero negriblanco" Azara, No. 28, Paraguay.

Falco brachypterus Temminck, Nouv. Rec. Pl. Col., livr. 20, pls. 116 (young), 141 (adult), Mar., 1822—Brazil, Guiana, and Paraguay[2] (cotypes: adult male from Corcovado, Rio de Janeiro[3] in Vienna Museum; young male, from Brazil, in the Leyden Museum).

Falco leucomelas (Illiger MS.) Lichtenstein, Verz. Doubl. Berliner Mus., p. 62, 1823—based on Azara, No. 28.

Astur brachypterus Spix, Av. Spec. Nov. Bras., **1**, p. 9, 1824—"in sylvis campestribus Bahiae."

Climacocercus brachypterus Burmeister, Syst. Uebers. Th. Bras., **2**, p. 88, 1855—Surinam (descr.).

Nisus brachypterus Schlegel, Mus. Pays-Bas, Astures, p. 52, 1862—part, spec. 2–4, Paraguay, Brazil, and Cayenne.

Micrastur brachypterus Pelzeln, Reise Nov., **1**, Zool., Vögel, p. 12, 1865; idem, Orn. Bras., **1**, p. 7, 1868—Rio de Janeiro (Corcovado), Matto Grosso (Villa Maria), Rio Madeira (Borba), Forte do Rio Branco, and Barra do Rio Negro, Brazil; Reinhardt, Vidensk. Medd. Naturhist. Foren., 1870, p. 68—Sumidouro, Minas Geraes; Hellmayr, Nov. Zool., **14**, p. 405, 1907—Borba, Rio Madeira; Berlepsch, l.c., **15**, p. 290, 1908—Cayenne; Hellmayr, l.c., **17**, p. 409, 1910—Borba; Bertoni, Faun. Parag., p. 42, 1914—Paraguay (Puerto Bertoni, Iguasú); Snethlage, Bol. Mus. Goeldi,

[1] Vieillot, in translating Azara's excellent description into French, ascribed the markings of the hindneck to the crown, as has been pointed out by Wetmore (Bull. U. S. Nat. Mus., **133**, p. 99, 1926), who rightly remarks that the Spanish original account clearly refers to the juvenile plumage of the Collared Harrier-Hawk.

[2] Ex Azara, Nos. 19 (not "29") and 28.

[3] Schlegel (Mus. Pays-Bas, Astures, p. 52, 1862) erroneously lists an adult female received in 1835(!) from the Paris Museum as the original of Pl. Col., pl. 141; but we have Temminck's testimony that the bird figured is at Vienna.

8, p. 126, 1914—Monte Alegre, Brazil; Chubb, Bds. Brit. Guiana, 1, p. 221, 1916—Bartica and Roraima; Cherrie, Sci. Bull., Mus. Brookl. Inst., 2, p. 344, 1916—Caicara, Rio Orinoco.

Micrastur semitorquatus Sclater and Salvin, Proc. Zool. Soc. Lond., 1869, p. 365—part, Brazil (Rio de Janeiro, Matto Grosso, Borba, Rio Negro, Rio Branco); iidem, l.c., 1873, p. 303—Santa Cruz, Peru; Ridgway, Proc. Bost. Soc. N. H., 16, p. 77, 1873—part, South America; Berlepsch, Journ. Orn., 21, p. 288, 1873—Blumenau, Santa Catharina; Sharpe, Cat. Bds. Brit. Mus., 1, p. 75, 1874—part, spec. a–d, Bahia and New Granada; Salvin and Godman, Ibis, 1880, p. 177—Valencia, Colombia; Taczanowski, Orn. Pér., 1, p. 160, 1884—part, Santa Cruz, Peru; Salvin, Ibis, 1886, p. 75—Roraima, British Guiana; Bangs, Proc. Biol. Soc. Wash., 12, p. 132, 1898—Santa Marta, Colombia; Ihering, Ann. Est. Rio Grande do Sul, 16, p. 139, 1899—Mundo Novo, Rio Grande do Sul; idem, Rev. Mus. Paul., 3, p. 345, 1899—São Paulo; Allen, Bull. Amer. Mus. N. H., 13, p. 130, 1900—Bonda, Colombia; Berlepsch and Hartert, Nov. Zool., 9, p. 113, 1902—Caicara, Rio Orinoco, Venezuela; Lönnberg, Ibis, 1903, p. 465—Tatarenda, Bolivia; Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., 22, No. 3, p. 570, 1906—Brazil; Ihering, Cat. Faun. Braz., 1, p. 85, 1907—São Paulo, Paraná (Ourinho), and Espirito Santo; Lillo, Apunt. Hist. Nat., 1, p. 22, 1909—Ledesma, Jujuy; Dabbene, Anal. Mus. Nac. Buenos Aires, 18, p. 241, 1910—Chaco and "Buenos Aires"; Arribálzaga, El Hornero, 2, p. 93, 1920—Chaco; Wetmore, Bull. U. S. Nat. Mus., 133, p. 99, 1926—west of Puerto Pinasco, Paraguay (nomencl.).

Micrastur melanoleucus Ridgway, Proc. Acad. Nat. Sci. Phila., 1875, p. 482—part, South America; Berlepsch and Ihering, Zeits. Ges. Orn., 2, p. 171, 1885—Rio Grande do Sul; Berlepsch, Journ. Orn., 35, p. 27, 1887—Lambaré, Paraguay; Robinson and Richmond, Proc. U. S. Nat. Mus., 24, p. 168, 1901—San Julián, near La Guaira, Venezuela; Sclater, Ibis, 1918, p. 344—part, South America; Reiser, Denks. Math.-Naturw. Kl. Akad. Wiss. Wien, 76, p. 202, 1924—Miritiba, Maranhão.

Micrastur melanoleucus melanoleucus Swann, Syn. List Accip., p. 15, 1919—part, Colombia, Venezuela, Brazil, and Paraguay; idem, Syn. Accip., p. 24, 1921 (in part); idem, Monog. Bds. Prey, 1, p. 140, 1925 (monog.); Darlington, Bull. Mus. Comp. Zool., 71, p. 368, 1931—Rio Frio, Magdalena, Colombia.

(?)*Micrastur melanoleucus buckleyi* Swann, Syn. List Accip., subst. p. 15, July, 1919—Sarayacu, Ecuador (type in British Museum examined); idem, Syn. Accip., p. 25, 1921—Sarayacu; idem, Monog. Bds. Prey, 1, p. 142, 1925—Sarayacu; Chapman, Bull. Amer. Mus. N. H., 55, p. 221, 1926—Rio Suno, San José, and below Baeza, eastern Ecuador.

Micrastur brachypterus brachypterus Todd and Carriker, Ann. Carnegie Mus., 14, p. 155, 1922—Bonda, Neguange, Cincinnati, Mamatoco, Dibulla, and Fundación, Colombia (crit.).

Micrastur semitorquatus semitorquatus Hellmayr, Field Mus. Nat. Hist., Zool. Ser., 12, p. 453, 1929—Miritiba, Maranhão; Naumburg, Bull. Amer. Mus. N. H., 60, p. 104, 1930—Matto Grosso; Peters, Bds. World, 1, p. 277, 1931 (range); Pinto, Rev. Mus. Paul., 20, p. 50, 1936—Rio das Almas (Fazenda Formiga), Goyáz; Steullet and Deautier, Obr. Cinc.

Mus. La Plata, p. 462, 1936 (range in Argentina);[1] Gyldenstolpe, K. Svensk. Vetensk. Akad. Handl., (3), **22**, p. 28, 1945—João Pessôa, Rio Juruá, Brazil (disc. plumages); idem, l.c., (3), **23**, p. 54, 1945—Puerto Salinas, El Beni, Bolivia.

(?)*Micrastur semitorquatus buckleyi* Peters, Bds. World, **1**, p. 277, 1931—Amazonian Ecuador.

Range.—Eastern Colombia (Santa Marta region) and from Venezuela and the Guianas through eastern Ecuador, eastern Peru (Santa Cruz), and Brazil south to Bolivia, northern Argentina (Chaco; Ledesma, Jujuy), Paraguay, and Rio Grande do Sul.[2]

Field Museum Collection.—20: Brazil (Obidos, Pará, 3; Labrea, Rio Purús, 1; Igarape Aniba, Rio Amazonas, 3; Lago do Baptista, Rio Amazonas, 3; Piquiatuba, Rio Amazonas, 3; Caxiricatuba, Rio Tapajoz, 2; Boca Ituqui, Rio Amazonas, 1); Bolivia, Santa Cruz (Buena Vista, 3; Rio Surutu, 1).

***Micrastur mirandollei** (Schlegel). MIRANDOLLE'S HARRIER-HAWK.

Astur mirandollei Schlegel, Mus. Pays-Bas, Astures, p. 27, after Sept., 1862—Surinam (type in the Leyden Museum); idem, Nederl. Tijdschr. Dierk., **1**, p. 130, 1863—Dutch Guiana (full descr.).

Micrastur poliogaster? (not *Falco poliogaster* Temminck) Lawrence, Ann. Lyc. Nat. Hist. N. Y., **7**, p. 317, 1861—Atlantic slope of the Isthmus of Panama.

Micrastur macrorhynchus (Natterer MS.) Pelzeln, Reise Nov., Zool., **1**, Vögel, p. 11, 1865—Barra do Rio Negro [=Manáos], Santa Maria do Rio Branco, and Pará, Brazil (cotypes in Vienna Museum examined).[3]

[1] Holmberg's record of *M. brachypterus* (Nat. Arg., **1**, p. 95, 1878) from San José de Flores and San Fernando, Prov. Buenos Aires, seems to be in need of confirmation by specimens actually taken.

[2] Birds from Colombia (Santa Marta), Venezuela, and British Guiana, in size and coloration, are inseparable from Brazilian specimens, their dimensions varying within the same limits. The proposed local race from eastern Ecuador (*buckleyi*) is questionable. The type is indeed smaller than any other specimen examined, but the color characters do not seem to be of any consequence. The brown spots in the white tail-bands are no doubt an individual feature, there being suggestions of them in a bird from Bahia and one from Borba. The type has five white tail-bands exactly like an adult from Roraima and one from southern Brazil. A young bird from Sarayacu is likewise very small, and on the basis of these two skins the form might be readily admitted. However, other examples from eastern Ecuador received by Chapman are fully as large as Brazilian specimens, and cast serious doubt on the validity of *buckleyi*.

Length of wing.—Female adult, Roraima, 260; female adult, Bartica, 265; female adult, Forte do Rio Branco, Brazil, 255; female adult, Miritiba, Maranhão, 263; male adult, Borba, Rio Madeira, 250; adult, Bahia, 265; male adult, Villa Maria, Matto Grosso, 243; male adult, Corcovado, Rio de Janeiro, 255; adult, Sarayacu, Ecuador, 215.

[3] An adult male from Pará and an adult female from Santa Maria do Rio Branco. The female from Barra do Rio Negro passed by exchange into the Leyden Museum.

Micrastur mirandollei Sclater and Salvin, Proc. Zool. Soc. Lond., 1867, pp. 753, 759—Chyavetas, Peru; Pelzeln, Orn. Bras., **1**, p. 7, 1868—Barra do Rio Negro, Santa Maria do Rio Branco, and Pará; Sclater and Salvin, Proc. Zool. Soc. Lond., 1869, p. 365—eastern Peru (Chyavetas) and Brazil (Barra do Rio Negro, Rio Branco) (monog.); iidem, l.c., 1873, p. 303—Chyavetas, Peru; Ridgway, Proc. Bost. Soc. N. H., **16**, p. 77, 1873—Peru, Brazil, and Panama (monog.); Sharpe, Cat. Bds. Brit. Mus., **1**, p. 76, 1874 (monog.; descr. of type); Ridgway, Proc. Acad. Nat. Sci. Phila., 1875, p. 485—Costa Rica (Talamanca) to Amazonia (monog.; descr. of young); Taczanowski, Proc. Zool. Soc. Lond., 1882, p. 47—Yurimaguas, Peru; idem, Orn. Pér., **1**, p. 159, 1884—Peru (Chyavetas, Yurimaguas); Salvin, Ibis, 1886, p. 501—Carimang River, British Guiana; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 109, pl. 64, 1901—Costa Rica (Talamanca), Panama (Railroad line), Amazonia, and Guiana (Rupununi River); Ihering, Cat. Faun. Braz., **1**, p. 85, 1907 (range);[1] Carriker, Ann. Carnegie Mus., **6**, p. 452, 1910—vicinity of Sipurio, Talamanca, Costa Rica; Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **26**, No. 2, p. 96, 1912—Pará; Snethlage, Bol. Mus. Goeldi, **8**, p. 126, 1914—Ourém, Rio Guamá, Pará; Chubb, Bds. Brit. Guiana, **1**, p. 221, 1916—Ituribisi River, Bartica, Arawai River, and Carimang River; W. L. Sclater, Ibis, 1918, p. 345—Costa Rica to Amazonia and Guiana; Swann, Syn. List Accip., p. 15, 1919 (range); idem, Syn. Accip., p. 25, 1921 (range); idem, Monog. Bds. Prey, **1**, p. 144, 1925 (monog.); Peters, Bds. World, **1**, p. 277, 1931 (range); Griscom, Bull. Mus. Comp. Zool., **72**, p. 317, 1932—Permé and Obaldia, eastern Panama; idem, Auk, **50**, p. 303, 1933—Rio Chepo, Darien; idem, Bull. Mus. Comp. Zool., **78**, p. 302, 1935—Panama; idem and Greenway, Bull. Mus. Comp. Zool., **81**, p. 418, 1937—Brazil (Rio Acará, Pará; Villa Braga, Rio Tapajóz) and Cayenne; Pinto, Rev. Mus. Paul., **23**, pp. 504, 547, 1938—São Gabriel (Rio Negro), Manacapurú, and Santarem, Brazil; Dugand, Caldasia, **1**, No. 3, p. 58, 1941—Rio Jurado, Choco.

Micrastur mirandollei extimus Griscom and Greenway, Bull. Mus. Comp. Zool., **81**, p. 418, May, 1937—Permé, eastern Panama (type in Museum of Comparative Zoology, Cambridge, Mass.).

Micrastur mirandollei mirandollei Gyldenstolpe, K. Svensk. Vetensk. Akad. Handl., (3), **22**, p. 30, 1945—João Pessõa, Rio Juruá (disc.).

Range.—Southeastern Costa Rica (Talamanca) and Panama through northwestern Colombia (Choco) to the Guianas, eastern Peru (Chyavetas, Yurimaguas), and Brazilian Amazonia east to the Pará region.[2]

[1] The specimen from the Rio Doce, Espirito Santo, listed by Ihering, can hardly be the present species. Pinto (Rev. Mus. Paul., **22**, p. 85, 1938) does not mention it.

[2] We cannot distinguish two Panama skins (*extimus*) from typical *mirandollei*. The palest, most indistinct tail-bands are shown by an adult male from Pará, while they are remarkably broad and nearly pure white in an adult female from

Field Museum Collection.—6: Colombia (Rio Jurado, Choco, 3); British Guiana (Itabu Creek, Middle Base Camp, 1); Brazil (Igarape Aniba, Rio Amazonas, 1; Piquiatuba, Pará, 1).

***Micrastur ruficollis guerilla** Cassin. GREY-THROATED HARRIER-HAWK.

Micrastur guerilla Cassin, Proc. Acad. Nat. Sci. Phila., **4**, p. 87, Oct., 1848—near Jalapa, Vera Cruz, Mexico (type in coll. of the Academy of Natural Sciences of Philadelphia; cf. Stone, Proc. Acad. Nat. Sci. Phila., **51**, p. 31, 1899); idem, Journ. Acad. Nat. Sci. Phila., n. ser., **1**, p. 259, pl. 40, 1850; Sclater and Salvin, Proc. Zool. Soc. Lond., 1869, p. 367—Mexico (Jalapa, Córdoba), Guatemala, Veragua, and Ecuador (Nanegal) (monog.); Salvin, l.c., 1870, p. 216—Calovévora, Veraguas; Sclater and Salvin, l.c., 1870, p. 838—[San Pedro], Honduras; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 79, 1874 (monog.); Ridgway, Proc. Acad. Nat. Sci. Phila., 1875, p. 486—Vera Cruz to Guayaquil, Ecuador (monog.); Sumichrast, La Naturaleza, **1**, p. 235, 1881—Orizaba and Uvero, Vera Cruz, Mexico; Berlepsch and Taczanowski, Proc. Zool. Soc. Lond., 1883, p. 574—Chimbo, Ecuador; iidem, l.c., 1884, p. 310—Surupata, Ecuador; Gurney, List Diurn. Bds. Prey, p. 119, 1884 (crit.; var.); Zeledón, Anal. Mus. Nac. Costa Rica, **1**, p. 126, 1887—Monte Redondo, Costa Rica; Cherrie, Anal. Inst. Fís.-Geog. y Mus. Nac. Costa Rica, **4**, p. 145, 1893—Boruca, Costa Rica; Richmond, Proc. U. S. Nat. Mus., **16**, p. 520, 1893—Rio Escondido, Nicaragua; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 110, 1901—Mexico (Jalapa, Cuesta de Misantla, Orizaba, Uvero, Córdoba), British Honduras (Cayo), Guatemala (Choctum), Honduras (San Pedro), Nicaragua (Matagalpa, La Libertad, Santo Domingo, Rio Coco, Managua, Rio Escondido), Costa Rica (Monte Redondo, Estrella, Jiménez, Irazú, Talamanca, Pozo del Pital, Carrillo), and Panama (Volcan de Chiriquí, Calovévora, Calobre, Lion Hill); Bangs, Bull. Mus. Comp. Zool., **39**, p. 141, 1903—Ceiba and Yaruca, Honduras; Dearborn, Field Mus. Nat. Hist., Orn. Ser., **1**, p. 84, 1907—Los Amates, Guatemala; Ménégaux, Miss. Serv. Géog. Armée Mes. Arc Mérid. Équat., **9**, p. B. 12, 1911—Gualea, Ecuador.

Micrastur concentricus (not *Nisus concentricus* Lesson) Sclater, Proc. Zool. Soc. Lond., **24**, p. 285, 1856—near Córdoba, Vera Cruz.

Micrastur gilvicollis (not *Sparvius gilvicollis* Vieillot) Sclater, Proc. Zool. Soc. Lond., **26**, p. 96, 1858—southern Mexico; Sclater and Salvin, Ibis, 1859, p. 218—Guatemala; Sclater, Proc. Zool. Soc. Lond., **28**, p. 96, 1860—Nanegal, Ecuador (spec. examined); Lawrence, Ann. Lyc. Nat. Hist. N. Y., **7**, p. 317, 1861—Atlantic slope of the Isthmus of Panama.

Micrastur xanthothorax (not *Falco xanthothorax* Temminck) Sclater, Proc. Zool. Soc. Lond., **27**, p. 368, 1859—vicinity of Jalapa, Mexico.

the Rio Branco. An apparently immature individual from British Guiana is even more strongly tinged with buff underneath than one of the Panama birds.

Additional material examined.—British Guiana (Carimang River, Rupununi River, Bartica, etc.), 9.—Brazil: Pará, 1; Ourém, Rio Guamá, Pará, 1; Santa Maria do Rio Branco, 1.—Peru: Chyavetás, 1.—Panama: Railroad line, 2.

Micrastur ruficollis (not *Sparvius ruficollis* Vieillot) Sclater and Salvin, Ibis, 1859, p. 218—Guatemala; Ridgway, Proc. Bost. Soc. N. H., **16**, p. 78, 1873—part, Mexico to Ecuador.

Micrastur zonothorax (not *Climacocercus zonothorax* Cabanis) Bangs, Auk, **18**, p. 358, 1901—Divalá, Chiriquí.

Micrastur interstes Bangs, Auk, **24**, p. 289, 1907—La Estrella de Cartago, Costa Rica (type now in Museum of Comparative Zoology, Cambridge, Mass.; cf. Bangs, Bull. Mus. Comp. Zool., **70**, p. 186, 1930); Ferry, Field Mus. Nat. Hist., Orn. Ser., **1**, p. 259, 1910—Guayábo, Costa Rica; Carriker, Ann. Carnegie Mus., **6**, p. 453, 1910—Costa Rica (Tenorio, Tuis, Pózo Azúl de Pirrís, Carrillo, Buenos Aires).

Micrastur guerrilla interstes Hellmayr, Proc. Zool. Soc. Lond., 1911, p. 1203—Nóvita, Rio Tamaná, Colombia; Chapman, Bull. Amer. Mus. N. H., **36**, p. 241, 1917—western Colombia (Dabeiba, La Vieja, Nóvita, San José, Las Lomitas, San Antonio, Salencio, ?Salento); Stone, Proc. Acad. Nat. Sci. Phila., **70**, p. 248, 1918—Agua Clara and Gatún, Panama; Chapman, Bull. Amer. Mus. N. H., **55**, p. 222, 1926—Rio de Oro, Gualea, Zaruma, and El Chiral, western Ecuador.

Micrastur ruficollis guerilla W. L. Sclater, Ibis, 1918, p. 346—Vera Cruz to western Ecuador (crit.); Peters, Bds. World, **1**, p. 278, 1931—Mexico to Guatemala; Griscom, Bull. Mus. Comp. Zool., **72**, p. 317, 1932—Permé, Panama (crit.); idem, l.c., **78**, p. 302, 1935—Panama; Traylor, Field Mus. Nat. Hist., Zool. Ser., **24**, p. 204, 1941—Pacaitun, Campeche, Mexico.

Climacocercus guerilla Swann, Syn. Accip., p. 27, 1921 (chars.; range in part).

Climacocercus guerilla interstes Lönnberg and Rendahl, Ark. Zool., **14**, No. 25, p. 33, 1922—Gualea and "Verdecocha," Ecuador.

Clamosocircus guerilla guerilla Swann, Monog. Bds. Prey, **1**, p. 151, pl. [9], lower fig., 1925—Mexico to Nicaragua (monog.); Austin, Bull. Mus. Comp. Zool., **69**, p. 372, 1929—Augustine, British Honduras.

Clamosocircus guerilla interstes Swann, Monog. Bds. Prey, **1**, p. 152, 1925—Costa Rica to Colombia and Ecuador (monog.).

Clamosocircus guerilla guerilla Bangs and Peters, Bull. Mus. Comp. Zool., **67**, p. 473, 1927—Presidio, Vera Cruz.

Micrastur ruficollis interstes Peters, Bds. World, **1**, p. 278, 1931—Costa Rica to western Colombia and Ecuador.

Micrastur guerilla guerilla Swann, Syn. List Accip., p. 16, 1919 (chars.; range excl. of Venezuela, Ecuador, and Brazil); Griscom, Bull. Amer. Mus. N. H., **64**, p. 150, 1932—Guatemala.

Range.—Tropical zone of southern Mexico (State of Vera Cruz; Chiapas) and south through British Honduras, Guatemala, Honduras, Nicaragua, Costa Rica, and Panama to western Colombia (Cauca), and western Ecuador;[1] (?)eastern Ecuador.

[1] After carefully studying a large series of adults and young covering the entire range from southern Mexico to western Ecuador, I have come to the conclusion that the southern race (*interstes*) should not be maintained. The least amount of barring below is indeed shown by three adults from Mexico (Jalapa;

Field Museum Collection.—23: Mexico (Ocozocoautla, Chiapas, 1; Pacaitun, Campeche, 1); Guatemala, Izabal (Escobas, 1; Los Amates, 1); Nicaragua (Matagalpa, 1); Costa Rica (Limón, 2; Boruca, Puntarenas, 1; Guayabo, Cartago, 1; San Carlos, Alajuela, 1); Panama (Barro Colorado Island, Canal Zone, 1); Colombia (Munchique, Cauca, 1; Rio Munchique, Cauca, 1; La Costa, El Tambo, Cauca, 1; Ricaurte, Narino, 1); Ecuador (Montes del Achotal, Pichincha, 2; Gualon, 1; Conchacoto, 1; Nanegal, 1; Aluguinche, Pichincha, 2; Macas, Oriente, 1[1]).

***Micrastur ruficollis zonothorax** (Cabanis).[2] RUFOUS-FACED HARRIER-HAWK.

Climacocercus zonothorax Cabanis, Journ. Orn., **13**, p. 406, 1865—"Puerto Cabello," Carabobo, Venezuela (type in Berlin Museum); Swann, Syn.

Santa Rita, Chiapas), in which the white bars are several times broader than the black ones, the latter having a tendency to become evanescent on middle of belly and crissum. An adult from Vera Paz is exactly the same. Two other Guatemalan skins have much more closely barred under parts, the black and white bands on the chest being of equal width, and the barring extending down to the under tail coverts, and they resemble the series from Honduras to Nicaragua. Birds from Costa Rica southward (*interstes*) are more broadly barred below, especially on the chest, where the dark bars are wider than the more *grayish* white interstices. Besides, the chest is often tinged with dull brownish, which is merely suggested in occasional individuals of more northern origin. There are, however, frequent exceptions to this rule. A topotype from La Estrella de Cartago and an adult male from Corazón (Ecuador) have no brownish wash on the chest and are indistinguishable, even in barring, from various Nicaraguan birds which, as a whole, more nearly approach "*interstes*" than do any from Guatemala, Belize, or Honduras. On the other hand, an adult male from Matagalpa is in every respect a typical *interstes*, and indistinguishable from Chiriquí birds. Brown-backed specimens are rather rare in this species, and in the large series examined one each from Jalapa, Vera Paz, San Pedro (Honduras), La Libertad (Nicaragua), and Chiriquí, represent this style of coloration. Bangs's supposition that the juvenile plumage of "*interstes*" is more heavily barred below, is disproved by the series at hand. Of seven young "*interstes*," two from Costa Rica (Carrillo, Escazú) have but a few scattered dusky bars like others from Jalapa and Choctum, while another from Carrillo and one from the Volcan de Chiriquí are broadly barred all over like one from Misantla. The others are intermediate and can be matched by numerous individuals from Mexico to Honduras.

Additional material examined.—Mexico: Cuesta de Misantla, Vera Cruz, 1; Jalapa, 4; Santa Rita, Chiapas, 1.—Guatemala: Coban, Vera Paz, 4; Choctum, 6; Sierra de las Minas, 1.—British Honduras: Cayo, 2; near Belize, 1.—Honduras: San Pedro, 3.—Nicaragua: Lake Managua, 1; La Libertad, 3; Rio Coco, 3; Santa Cruz, Rio Coco, 1; San Rafael, 1; Santo Domingo, 1; Matagalpa, 1.—Costa Rica: Estrella de Cartago, 1; Escazú, 1; Carrillo, 3.—Panama: Chiriquí, 1; Frances, Chiriquí, 1; Volcan de Chiriquí, 1; Calovévora, Veragua, 1; Calóbre, Veragua, 2.—Colombia: Nóvita, 1; "vicinity of Pasto," 1.—Ecuador: Paramba, 1; lower side of Corazón, 1; Balzar, 1; Nanegal, 1.—C.E.H.

[1] This specimen may have been wrongly labeled as to locality. It has no dull rufescent color on the throat as in *M. r. zonothorax*. It is a male, wing 167 mm., with dorsal surface as in *M. r. guerilla*.—B.C.

[2] *Micrastur ruficollis zonothorax* (Cabanis): Similar to southern specimens of *M. r. guerilla* in having the whole under parts from foreneck to crissum nearly

Accip., p. 26, 1921 (chars.; range); idem, Auk, **38**, p. 357, 1921—Montaña Sierra, El Valle, Limones, and Chamá, Mérida (crit.).

Nisus xanthothorax (not *Falco xanthothorax* Temminck) Schlegel, Mus. Pays-Bas, Astures, p. 50, 1862—part, spec. 1, 4, Caracas, Venezuela.

Micrastur zonothorax Sclater and Salvin, Proc. Zool. Soc. Lond., 1869, pp. 252, 254—coast range of Puerto Cabello; iidem, l.c., p. 366—Puerto Cabello, Venezuela, and Bogotá, Colombia (monog.); iidem, l.c., 1873, p. 511—Caracas, Venezuela; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 79, 1874 (monog.); Ridgway, Proc. Acad. Nat. Sci. Phila., 1875, p. 489—Venezuela (Puerto Cabello) and Bogotá (monog.); Gurney, List Diurn. Bds. Prey, p. 120, 1884—Venezuela (descr. of adult and young); Todd and Carriker, Ann. Carnegie Mus., **14**, p. 158, 1922—Cincinnati, Sierra Nevada de Santa Marta, Las Vegas, San Lorenzo, Pueblo Viejo, and Chirua, Colombia (crit.).

Micrastur jugularis Gurney, List Diurn. Bds. Prey, p. 118, 1884—part, spec. Nos. 3, 4, Venezuela and Colombia.

Micrastur ruficollis (not *Sparvius ruficollis* Vieillot) Allen, Bull. Amer. Mus. N. H., **13**, p. 130, 1900—Valparaiso and El Libano, Santa Marta, Colombia.

Micrastur ruficollis zonothorax W. L. Sclater, Ibis, 1918, p. 347 (crit.); Swann, Syn. List Accip., p. 16, 1919—Colombia and Venezuela (chars.); Peters, Bds. World, **1**, p. 278, 1931 (range).

Climacocercus guerilla jugularis Swann, Syn. Accip., Addenda to Part 3, p. ii, 1922—part, Colombia and Venezuela.

Clamosocircus zonothorax Swann, Monog. Bds. Prey, **1**, p. 147, 1925 (monog.).

Clamosocircus guerilla jugularis Swann, Monog. Bds. Prey, **1**, p. 152, 1925—part, Colombia and Venezuela.

(?)*Micrastur guerilla jugularis* Chapman, Bull. Amer. Mus. N. H., **55**, p. 222, 1926—Rio Suno and below San José, eastern Ecuador.

Range.—Tropical zone of northern Venezuela (from the coast ranges of the Caracas region to the Cordillera of Mérida) and eastern Colombia (Santa Marta region and eastern Andes); (?)eastern Ecuador.

Field Museum Collection.—2: Venezuela (Paramo de Tama, Tachira, 1; La Azulita, Merida, 1).

evenly barred with blackish; but larger, sides of face and throat dull reddish brown instead of neutral gray, and wings at least in part dull rufous brown. Wing, 174–190; tail, 170–185.

The upper parts in this form vary from dark slate gray to bright rufous brown, thus corresponding to the variation observable in *M. r. ruficollis*, from which it may, however, be separated by larger size, stronger bill, broader black barring underneath, and the much duller rufescent color, which is restricted to the throat. Birds from Santa Marta and Bogotá agree with a Venezuelan series. We have no Ecuadorian material.

Additional material examined.—Venezuela: Galipán, near Caracas, 3; Silla de Caracas, 2; Cordillera of Mérida, 8.—Colombia: Bonda, 2; "Bogotá," 2.

***Micrastur ruficollis ruficollis** (Vieillot). RED-NECKED HARRIER-HAWK.

Sparvius ruficollis Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **10**, p. 322, 1817—"l'Amérique méridionale"(=Brazil)[1] (type in Paris Museum examined;= rufous variety of adult); idem, Tabl. Enc. Meth., Orn., livr. 93, p. 1263, 1823—"l'Amérique méridionale"; Pucheran, Rev. Mag. Zool., (2), **2**, p. 91, 1850 (crit. note on type).

Falco xanthothorax Temminck, Nouv. Rec. Pl. Col., livr. 16, pl. 92, Nov., 1821—"la Guyane [errore] et le Brésil" (type in the Leyden Museum; =rufous variety of adult); Spix, Av. Spec. Nov. Bras., **1**, p. 19, 1824—Rio de Janeiro.

Falco leucauchen Temminck, Nouv. Rec. Pl. Col., livr. 52, pl. 306, Nov. 27, 1824—Brazil=Goyáz (type in Paris Museum[2] examined;=young).

Climacocercus xanthothorax Burmeister, Syst. Uebers. Th. Bras., **2**, p. 85, 1855—Nova Friburgo, Rio de Janeiro.

Nisus xanthothorax Schlegel, Mus. Pays-Bas, Astures, p. 50, 1862—part, spec. Nos. 2–9, Brazil and "Guiana."

Micrastur xanthothorax Pelzeln, Orn. Bras., **1**, p. 7, 1868—Mattodentro, Ypanemá, and Itararé, São Paulo; Reinhardt, Vidensk. Medd. Naturhist. Foren., 1870, p. 68—Lapa do Bahú and Lagõa Santa, Minas Geraes.

Micrastur leucauchen Sclater and Salvin, Proc. Zool. Soc. Lond., 1869, p. 367—part, Bahia (descr. of plumbeous variety of adult); Ridgway, Proc. Bost. Soc. N. H., **16**, p. 80, 1873—Brazil (descr. of young).

Micrastur ruficollis Sclater and Salvin, Proc. Zool. Soc. Lond., 1869, p. 366—Bahia, Rio de Janeiro, São Paulo, and Goyáz (monog.; descr. of rufous variety); Berlepsch, Journ. Orn., **21**, p. 287, 1873—Blumenau, Santa Catharina (crit.; descr. of young); Ridgway, Proc. Bost. Soc. N. H., **16**, p. 78, 1873—part, Brazil; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 76, 1874—Brazil, "Venezuela, and Guiana" (errore); Ridgway, Proc. Acad. Nat. Sci. Phila., 1875, p. 490—Bahia and Rio de Janeiro (monog.; descr. of plumbeous and rufous varieties); Gurney, Ibis, 1875, p. 232 (crit.); Berlepsch and Ihering, Zeits. Ges. Orn., **2**, p. 171, 1885—Rio Grande do Sul; Allen, Bull. Amer. Mus. N. H., **3**, p. 147, 1893—Chapada, Matto Grosso; Salvadori, Boll. Mus. Zool. Torino, **12**, No. 292, p. 29, 1897—San Lorenzo, Jujuy; Ihering, Ann. Est. Rio Grande do Sul, **16**, p. 139,

[1] Suggested as type locality by Hellmayr (Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **22**, No. 3, p. 573, 1906), restricted to Rio de Janeiro by Naumburg (Bull. Amer. Mus. N. H., **60**, p. 105, 1930).

[2] Although Schlegel (Mus. Pays-Bas, Astures, p. 51, 1862) claims the type to be one of Natterer's specimens in the Leyden Museum, it is quite evident from Temminck's own statement (text to *Falco hemidactylus*, footnote to p. 2) that one of the birds sent by Auguste de Saint-Hilaire to the Paris Museum and figured by Huet on plate 306 served as original for his account. Against Ridgway's doubts (Proc. Acad. Nat. Sci. Phila., 1875, p. 493) about the correct identification of *F. leucauchen*, we may mention that several of our juvenile individuals of *ruficollis* show distinct white, dusky-edged superciliaries, and also agree in other particulars with Temminck's description and plate. If the pileum, on the latter, is represented as rufous brown like the back, this is clearly the artist's fault, since we read in the text: "Le sommet de la tete et de l'occiput sont noirs."

1899—Mundo Novo, Rio Grande do Sul; idem, Rev. Mus. Paul., **3**, p. 346, 1899—Piquete, São Paulo; Salvadori, Boll. Mus. Zool. Torino, **15**, No. 378, p. 14, 1900—Urucúm, Matto Grosso; Ihering, Rev. Mus. Paul., **4**, p. 162, 1900—Cantagallo and Nova Friburgo, Rio de Janeiro; Lillo, Anal. Mus. Nac. Buenos Aires, **8**, p. 203, 1902—Taff Viejo, Tucumán; idem, Rev. Letr. Cienc. Soc., **3**, No. 13, p. 61, 1905—Taff Viejo; Miranda, Arch. Mus. Nac. Rio de Janeiro, **13**, p. 187, 1906—Morro dos Carneiros, Itatiaya; Ihering, Cat. Faun. Braz., **1**, pp. 86, 409, 1907—São Paulo (Piquete, Iguapé), Paraná (Ourinho), Rio Grande do Sul (São Lourenço), Minas Geraes (Marianna), and Espirito Santo (Rio Doce); Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 241, 1910 (range in Argentina); Chubb, Ibis, 1910, p. 70—Sapucay, Paraguay; Reiser, Denks. Math.-Naturw. Kl. Akad. Wiss. Wien, **76**, p. 89, 1910—Lagõa do Missão, Parnaguá, Piauhy; Chrostowski, Compt. Rend. Soc. Sci. Varsovie, **5**, pp. 468, 494, 1912—Vera Guarany, Paraná; Dabbene, Bol. Soc. Physis, **1**, p. 299, 1914—Jujuy, Tucumán, and Paraguay; Snethlage, Bol. Mus. Goeldi, **8**, p. 126, 1914—"Pará"; Bertoni, Faun. Parag., p. 42, 1914—Alto Paraná, Paraguay; Sztolcman, Ann. Zool. Mus. Pol. Hist. Nat., **5**, p. 122, 1926—Candido de Abreu and Therezina, Paraná; Snethlage, Bol. Mus. Nac. Rio de Janeiro, **2**, No. 6, p. 47, 1926—Ceará; Holt, Bull. Amer. Mus. N. H., **57**, p. 283, 1928—Morro dos Carneiros, Itatiaya; Pinto, Rev. Mus. Paul., **19**, p. 96, 1935—Rio Jucurucú, Bahia.

Climacocercus ruficollis Cabanis, Journ. Orn., **22**, p. 229, 1874—Cantagallo, Rio de Janeiro; Swann, Syn. Accip., p. 25, 1921 (chars.; range).

[*Micrastur*] *jugularis* Gurney, List Diurn. Bds. Prey, p. 118, 1884—part, spec. 1, 2, Bahia (type, from Bahia, in Salvin–Godman Collection, now in British Museum, examined);[1] Hellmayr, Nov. Zool., **28**, p. 179, 1921 (crit.).

Micrastur gilvicollis (not *Sparvius gilvicollis* Vieillot) Ihering, Rev. Mus. Paul., **3**, p. 347, 1899—Piracicaba, São Paulo (spec. examined;=young); idem, Cat. Faun. Braz., **1**, p. 86, 1907—part, Piracicaba, São Paulo.

Thrasyaccipiter seminocturnis Bertoni, Anal. Cient. Parag., **1**, No. 1, p. 164, Jan., 1901—Alto Paraná, Paraguay (type in coll. of A. de W. Bertoni).[2]

Micrastur ruficollis ruficollis W. L. Sclater, Ibis, 1918, p. 345—Bahia to Paraguay (crit.); Swann, Syn. List Accip., p. 16, 1919 (hab. in part); Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **12**, p. 454, 1929—near Parnaguá, Piauhy (ex Reiser); Naumburg, Bull. Amer. Mus. N. H., **60**, p. 105, 1930—Matto Grosso; Peters, Bds. World, **1**, p. 277, 1931 (range); Steullet and Deautier, Obr. Cinc. Mus. La Plata, p. 463, 1936—Argentina.

[1] The name *jugularis* was principally based on two adults in the plumbeous "phase" from Bahia in the Salvin–Godman Collection (Nos. 1, 2), and we are at a loss to understand why Swann (Syn. Accip., Addenda to Part 3, p. ii, 1922) selects "Venezuela" as type locality. The specimens in the Norwich Museum—which we have not seen—if correctly labeled as being from Venezuela and Colombia, must, of course, pertain to *M. r. zonothorax*.

[2] It is possible that *Accipiter virgatus* Bertoni (Anal. Cient. Parag., **1**, No. 1, p. 163, Jan., 1901—type, from Djaguarasapá, Alto Paraná, Paraguay, in coll. of A. de W. Bertoni) refers to the juvenile stage of the same species. The author (Rev. Inst. Parag., 1907, p. 10) is inclined to identify it with *M. gilvicollis*.

Clamosocircus ruficollis Swann, Monog. Bds. Prey, **1**, p. 145, 1925—Brazil to northern Argentina and Paraguay (monog.).

Clamosocircus guerilla jugularis Swann, Monog. Bds. Prey, **1**, p. 152, 1925—part, Brazil.

Range.—Brazil, from southern Piauhy, Ceará, and Matto Grosso to Rio Grande do Sul, Paraguay, and northern Argentina (San Lorenzo, Jujuy; Tafí Viejo, Tucumán).[1]

Field Museum Collection.—2: Brazil (Piraputanga, Matto Grosso, 1; Joinville, Santa Catharina, 1).

***Micrastur gilvicollis gilvicollis** (Vieillot). WHITE-THROATED HARRIER-HAWK.

Sparvius gilvicollis Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **10**, p. 323, 1817—no locality=Cayenne[2] (type in Paris Museum examined;=adult); idem, Tabl. Enc. Méth., Orn., livr. 93, p. 1264, 1823; Pucheran, Rev. Mag. Zool., (2), **2**, p. 91, 1850 (crit.).

Nisus concentricus (Illiger MS.) Lesson, Traité d'Orn., livr. 1, p. 60, Feb., 1830—Cayenne (type in Paris Museum examined; descr. of immature); d'Orbigny, Voy. Amér. Mérid., Ois., p. 178, 1835—Yuracares and Yungas, Bolivia; Lafresnaye and d'Orbigny, Syn. Av., **1**, in Mag. Zool., **7**, cl. 2, p. 4, 1837—Yungas and Moxos, Bolivia; Schlegel, Mus. Pays-Bas, Astures, p. 51, 1862—Brazil and "Colombia" (crit.).

Climacocercus concentricus Cabanis, in Tschudi, Unters. Faun. Peru., Orn., livr. 7, p. 98, 1846—Bahia, Pará, and Cayenne (descr.); idem, in Schomburgk, Reisen Brit. Guiana, **3**, "1848," p. 738, 1849—Surinam, Brazil, and Peru; Burmeister, Syst. Uebers. Th. Bras., **3**, p. 86, 1855—Pará and Bahia, Brazil.

Micrastur gilvicollis Sclater, Proc. Zool. Soc. Lond., **25**, p. 261, 1857—Rio Javarrí, Brazil; Pelzeln, Reise Nov., Zool., **1**, Vögel, p. 10, 1865—Cayenne,

[1] *M. r. ruficollis*, in adult plumage, has a plumbeous (*jugularis*) and a rufous "phase," as has first been pointed out by Ridgway (1875, pp. 491–492) and subsequently by Sclater (Ibis, 1918, p. 346) and Hellmayr (Nov. Zool., **28**, pp. 179–180, 1921). A series of ten skins from Bahia, including the two originals of Gurney's, wonderfully illustrates the complete intergradation between these stages. It appears, however, that the plumbeous variety is of rather unusual occurrence in the southern part of the range, since nearly all of the numerous individuals from Rio de Janeiro to Santa Catharina are in the rufous "phase." Still, an adult male from Paraguay (Sapucay) and a female from Paraná (Morretet, Serra do Mar) resemble the plumbeous variety on the upper, the rufous one on the under parts. The localities "Cayenne" and "Guiana" (cf. Berlepsch, Nov. Zool., **15**, p. 290, 1908—ex Schlegel) are undoubtedly inaccurate, and whether this bird really occurs near Pará, as recorded by Mme. Snethlage, also requires confirmation.

Additional material examined.—Piauhy: Lagõa Missão, Parnaguá, 1.—Bahia: unspecified, 10.—Rio de Janeiro, 6.—São Paulo: Victoria, 1; Mattodentro, 2; Ypanemá, 2; Serra de São Sebastião, 1; Corumbatahy, 1; Piracicaba, 1; Campos do Jordão, Itatiaya, 1.—Paraná: Morretet, Serra do Mar, 1.—Santa Catharina: Joinville, 11.—Paraguay: Sapucay, 1.

[2] Suggested as type locality by Hellmayr (Nov. Zool., **17**, p. 410, 1910).

[Villa Bella de] Matto Grosso, Borba (Rio Madeira), and São Gabriel (Rio Negro), Brazil (descr. of adult and young); Sclater and Salvin, Proc. Zool. Soc. Lond., 1866, p. 198—Sarayacu, Rio Ucayali, Peru; iidem, l.c., 1867, p. 590—Pará; Pelzeln, Orn. Bras., **1**, p. 7, 1867—Matto Grosso, Borba, and São Gabriel, Brazil; Sclater and Salvin, Proc. Zool. Soc. Lond., 1869, p. 368—Cayenne, eastern Peru, Bolivia, and Brazil (monog.; crit.); iidem, l.c., 1873, p. 303—Peru (Rio Javarrí, Sarayacu, Chamicuros); Sharpe, Cat. Bds. Brit. Mus., **1**, p. 78, 1874—Brazil (Pará, Capim River), Colombia ("Bogotá"), and "Trinidad"; Gurney, List Diurn. Bds. Prey, pp. 121–126, 1884—Peru (Sarayacu, Iquitos), Cayenne, British Guiana (Camacusa, Bartica Grove, Demerara), and Ecuador (Sarayacu) (crit.; meas.); Taczanowski, Orn. Pér., **1**, p. 162, 1884—Peru (Rio Javarrí, Sarayacu, Chamicuros, Amable Maria); Salvin, Ibis, 1886, p. 75—Camacusa and Bartica Grove, British Guiana; Lillo, Anal. Mus. Nac. Buenos Aires, **8**, p. 202, 1902—Taff Viejo, Tucumán; idem, Rev. Letr. Cienc. Soc., **3**, No. 13, p. 61, 1905—Taff Viejo; Ihering, Rev. Mus. Paul., **6**, "1904," p. 450, 1905—Rio Juruá, Brazil; Berlepsch and Stolzmann, Ornis, **13**, p. 124, 1906—Rio Cadena, Marcapata, Peru; Ihering, Cat. Faun. Braz., **1**, p. 86, 1907—part, Rio Juruá; Hellmayr, Nov. Zool., **14**, p. 405, 1907—Borba, Rio Madeira; Berlepsch, l.c., **15**, p. 290, 1908—Ipousin (Approuague River) and Cayenne, French Guiana; Hellmayr, l.c., **17**, p. 410, 1910—São Izabel, Rio Preto, Rio Madeira (crit.); Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 241, 1910—Tucumán (ex Lillo); Ménégaux, Miss. Serv. Géog. Armée Mes. Arc Mérid. Équat., **9**, p. B. 12, 1911—upper Napo, Ecuador; Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **26**, No. 2, p. 96, 1912—Pará; Snethlage, Bol. Mus. Goeldi, **8**, p. 126, 1914—Rio Xingú (Victoria), Rio Curuá (Malocca de Manoelsinho), and Rio Jary (Santo Antonio da Cachoeira); Chubb, Bds. Brit. Guiana, **1**, p. 223, 1916—Ituribisi, Supenaam, Berbice, Tiger Creek, Camacusa, and Bartica Grove; Swann, Syn. List Accip., p. 16, 1919 (chars.; range); Lima, Rev. Mus. Paul., **12**, (2), p. 96, 1920—Ilhéos to Belmonte [=Itabuna], Bahia; Hellmayr, Nov. Zool., **28**, p. 178, 1921—San Mateo, Yuracares, Bolivia (crit.; range); Chapman, Bull. Amer. Mus. N. H., **55**, p. 222, 1926—part, upper Napo, Ecuador (not Nanegal); Stone, Proc. Acad. Nat. Sci. Phila., **80**, p. 154, 1928—Rio Muriteua and Pará, Pará; Pinto, Rev. Mus. Paul., **19**, p. 97, 1935—Rio Jucurucú (Cachoeira Grande) and Itabuna, Bahia (crit.).

Micrastur concentricus Pelzeln, Reise Nov., Zool., **1**, Vögel, p. 8, 1865—Cayenne, Brazil (Marabitanas, Barra do Rio Negro, Pará, near Rio de Janeiro), and Bolivia (descr. of adult and young); idem, Orn. Bras., **1**, p. 7, 1868—Marabitanas, Barra do Rio Negro, and Pará; Ridgway, Proc. Bost. Soc. N. H., **16**, p. 81, 1873 (monog.); idem, Proc. Acad. Nat. Sci. Phila., 1875, p. 496 (monog.); Taczanowski, Proc. Zool. Soc. Lond., 1874, p. 553—Amable Maria, Peru.

Micrastur leucauchen (not *Falco leucauchen* Temminck) Sclater and Salvin, Proc. Zool. Soc. Lond., 1869, p. 367—part, Matto Grosso.

Micrastur pelzelni Ridgway, Ibis, (3), **6**, No. 1, p. 4, Jan., 1876—Sarayacu, Rio Ucayali, Peru (type in Salvin-Godman Collection, now in British Museum, examined); idem, Proc. Acad. Nat. Sci. Phila., 1875, p. 494,

pub. Mar. 14, 1876—Sarayacu (full descr.); Taczanowski, Orn. Pér., **1**, p. 161, 1884—Sarayacu, Peru; Ménégaux, Bull. Mus. Hist. Nat. Paris, **14**, p. 107, 1908—upper Rio Napo, Ecuador.

Micrastur guerilla (not of Cassin) Taczanowski, Proc. Zool. Soc. Lond., 1879, p. 242—Guajango, Peru.

Micrastur interstes (not of Bangs) Chubb, Bds. Brit. Guiana, **1**, p. 223, 1916—Ituribisi, Anarica River, and Abary River (spec. examined).[1]

Micrastur ruficollis gilvicollis W. L. Sclater, Ibis, 1918, p. 346—Guiana and Amazon Valley; Naumburg, Bull. Amer. Mus. N. H., **60**, p. 105, 1930—Matto Grosso (ex Pelzeln); Peters, Bds. World, **1**, p. 278, 1931 (range).

Micrastur ruficollis (not *Sparvius ruficollis* Vieillot) Chubb, Ibis, 1919, p. 280—Charuplaya, La Paz, Bolivia (young).

Climacocercus gilvicollis Swann, Syn. Accip., p. 26, 1921 (chars.; range).

Clamosocircus gilvicollis Swann, Monog. Bds. Prey, **1**, p. 149, 1925 (monog.).

Micrastur plumbeus (not of Sclater) Neumann, Verh. Orn. Ges. Bay., **20**, p. 188, 1933—Bahia (crit.).

Micrastur gilvicollis gilvicollis Gyldenstolpe, K. Svensk. Vetensk. Akad. Handl., (3), **22**, p. 30, 1945—João Pessõa and Igarape do Gordao, Rio Juruá (crit.).

Range.—French, Dutch, and British Guiana; the Amazon Valley and its tributaries from the Pará region west to the eastern base of the Andes in Colombia (native Bogotá collections), Ecuador (Sarayacu, upper Napo), and eastern Peru (Iquitos; Sarayacu, Rio Ucayali; Pozúzo and Chuchurras, Dept. Huánuco; Amable Maria, Dept. Junín;[2] Rio Cadena, Marcapata; Yahuarmayo, Dept. Puno), south to western Matto Grosso (Villa Bella), eastern Bolivia (Yuracares, San Mateo), and northwestern Argentina (Tafí Viejo; Tucumán);[3] also sparingly recorded from Bahia (Rio Jucurucú, Itabuna) and Rio de Janeiro,[4] eastern Brazil.[5]

[1] In no wise different from those listed as *M. gilvicollis*.

[2] The Amable Maria specimen has lately been made the type of *Micrastur ruficollis Kalinowskii* Dunajewski (Act. Orn. Mus. Zool. Pol., **2**, No. 15, p. 319, June 8, 1938), but the author fails to tell us how this supposed race differs from *M. g. gilvicollis* in immature plumage. Adult birds from various parts of Peru (*pelzelni*) we are unable to separate from a Guianan series.

[3] Also recorded by Bertoni (Rev. Inst. Parag., 1907, p. 10; Faun. Parag., p. 42, 1914) from the Alto Paraná, Paraguay, where it is said to be more common than *M. r. ruficollis!*

[4] Sztolcman (Ann. Zool. Mus. Pol. Hist. Nat., **5**, p. 122, 1926) refers a single young bird from Cará Pintada, Paraná, to *M. gilvicollis*.

[5] The variation of the species has been the subject of investigations by various authors. Pelzeln (1865) was the first to attempt the subdivision of the Grey-throated Harrier-Hawk on the basis of the proportion of the tail and the number of white tail-bands, and Neumann lately went even so far as to refer certain short-tailed individuals from eastern Brazil (Bahia and Pará) to *M. plumbeus*, of western Ecuador. Intending to settle the problem, I took part of the Vienna Museum

Field Museum Collection.—10: British Guiana (Middle Base Camp, Itabu Creek, 1); Brazil (Rio Curi Cuyari, Amazonas, 1; Labrea, Rio Purus, 1; Igarape Aniba, Amazonas, 2; Igarape do Gordao, Amazonas, 1; Obidos, Para, 2; Piquiatuba, Para, 2).

material, together with the two Berlin specimens from Bahia and a couple of adults from Aveiros, Rio Tapajóz, kindly lent for that purpose by Dr. Stresemann and Count Gyldenstolpe, to London for comparison with the long series in the British Museum. To begin with, I may recall the fact that, as has been recorded in another place (Nov. Zool., 28, pp. 178–179, 1921), the types of *S. gilvicollis* Vieillot and *N. concentricus* Lesson, on careful study, were both found to be long-tailed individuals with three and four white tail-bands, respectively, the former being adult, the latter immature. Furthermore, the identity of *M. pelzelni* with *M. gilvicollis* has been set forth by me (Nov. Zool., 17, p. 410, 1910), and recent re-examination of upper Amazonian material not only corroborates this conclusion, but also shows that Ridgway's type, even in the decidedly gray color of the throat, is exactly matched by occasional Guianan examples, notably one from Camacusa. It remains only to discuss the east Brazilian birds identified by Neumann with *M. plumbeus*. On comparing six skins (two from Pará, two from Aveiros, Rio Tapajóz, and two from Bahia) with Sclater's original series, I find them to differ by somewhat darker (deep neutral gray to deep mouse gray) upper parts, longer tail, and broader, more widely set dark and white pectoral bands. In tone of dorsal surface and markings of under parts, they resemble *M. gilvicollis*, from British Guiana, whence there is a huge series in the British Museum, but in proportionate length of tail they occupy an intermediate position between *gilvicollis* and *plumbeus*, though an adult male from Bartica Grove has the tail just as short (144 mm.) as those from Bahia! The only character they have in common with *plumbeus* is the presence of only *one* (visible) white band across the middle of the tail. However, there are two specimens from the Pará region, collected by A. R. Wallace, in the British Museum, which have the long, twice-banded tail of *gilvicollis* (155, 170 mm. resp.), while a male secured by Natterer at Pará on Dec. 10, 1835, is just intermediate in length and markings of the tail. Besides, not all individuals occurring in eastern Brazil are of the short-tailed type, since an adult shot by Zelebor near Rio de Janeiro has a long twice-banded tail (150 mm.), and Pinto (Rev. Mus. Paul., 19, p. 99, 1936) records a similar specimen (tail, 156 mm.) from Rio Jucurucú, Bahia. It is thus evident that the short-tailed form with only one visible white band across the rectrices, though known merely from south of the lower Amazon and Bahia, is not only associated with *M. gilvicollis* in its range, but even connected with it by intermediates. Under these circumstances, I cannot see in these individuals anything but local variants of *gilvicollis*, approaching in a certain way *M. g. plumbeus*, which is clearly its representative in western Ecuador. Finally, it may be mentioned that the majority of these short-tailed birds have a second, well-developed white tail-band, wholly concealed, however, by the upper tail coverts. In conclusion it may be added that an adult male from Villa Bella de Matto Grosso (=*M. leucauchen* Sclater and Salvin, adult male) differs from any of the numerous other specimens examined by the much paler, more ashy coloration of the upper parts, sides of head, and throat, and by the barring below, which as in some Guianan birds, extends unimpaired from foreneck to under tail coverts, and is much lighter, mouse gray rather than blackish. Whether this variation has any significance other than individual, remains to be corroborated by adequate material from Matto Grosso.

The occurrence of the Grey-throated Harrier-Hawk in part of the range of *M. r. ruficollis* having been now established beyond doubt, I agree with Pinto that *M. gilvicollis* must henceforth be regarded as specifically distinct.

Additional material examined.—French Guiana: Cayenne, 6; Ipousin, Approuague River, 1.—British Guiana: Camacusa, 5; Anarica River, 1; Iturubisi, 4; Quonga, 2; Bartica Grove, 2; River Takutú, 2; Abary River, 1; Carimang River, 4; Berbice, 1; Tiger Creek, 1; Canuku Mountains, 1; Supenaam, 1; unspecified, 1.—Brazil: Pará, 4; Rio Capim, Pará, 1; Manáos, 1; São Gabriel, Rio Negro, 1; Marabitanas, Rio Negro, 1; Aveiros, Rio Tapajóz, 2; Rio Curuá, 1; Victoria, Rio Xingú, 1; Borba, Rio Madeira, 2; São Izabel, Rio Preto, Rio Madeira, 1.—C.E.H.

***Micrastur gilvicollis plumbeus** W. L. Sclater.[1] PLUMBEOUS HARRIER-HAWK.

Micrastur plumbeus W. L. Sclater, Bull. Brit. Orn. Cl., **38**, p. 44, Mar., 1918—Rio Bogotá, Prov. Esmeraldas, Ecuador (type in British Museum examined); idem, Ibis, 1918, p. 347, pl. 8—Carondelet, Rio Bogotá, Ecuador; Chapman, Bull. Amer. Mus. N. H., **55**, p. 222, 1926—Carondelet (ex Sclater); Peters, Bds. World, **1**, p. 278, 1931 (range); Bond and de Schauensee, Proc. Acad. Nat. Sci. Phila., **92**, p. 154, 1940—Rio Munchique, Cauca, Colombia (crit.); Lehmann, Caldasia, **3**, No. 12, p. 225, 1944—Guayana, Narino, Colombia (descr. of three examples).

Climacocercus plumbeus Swann, Syn. Accip., p. 26, 1921 (chars.; range).

Clamasocircus plumbeus Swann, Monog. Bds. Prey, **1**, p. 150, 1925 (monog.).

Range.—Tropical zone of the Cauca Valley, Colombia, and northwestern Ecuador (Rio Bogotá, Bulún, and Rio Sapayo, Prov. Esmeraldas).

Field Museum Collection.—6: Colombia, Cauca (La Costa, El Tambo, 3; Rio Munchique, 2; Munchique, 1).

Subfamily DAPTRIINAE. Caracaras

Genus **DAPTRIUS** Vieillot

Daptrius Vieillot, Anal. Nouv. Orn. Élém., p. 22, April, 1816—type, by monotypy, *Daptrius ater* Vieillot.

Ibycter Vieillot, Anal. Nouv. Orn. Élém., p. 22, April, 1816—type, by monotypy, "Petit Aigle de l'Amérique" Buffon=*Falco americanus* Boddaert.

Gymnops Spix, Av. Spec. Nov. Bras., **1**, p. 11, 1827—type, by subs. desig. (Sharpe, Cat. Bds. Brit. Mus., **1**, p. 34, 1874), [*Gymnops aterrimus* Spix=] *Daptrius ater* Vieillot.

[1] *Micrastur gilvicollis plumbeus* W. L. Sclater: Similar to the short-tailed individuals of the nominate race, but above decidedly lighter gray, neutral gray instead of deep mouse gray, hence paler and more bluish; chest and breast more closely barred with deep neutral gray and white; tail shorter; bill markedly smaller. Wing (sexes not reliable), 169–178; tail 125, 128, 132; bill (from cere), 15.

The three specimens seen are very uniform. One has no trace of a second white basal tail-band, which is suggested by short transverse markings on the inner webs of the four or five outer rectrices in the type and another example. All three have a distinct white band across the middle of the tail as is the case in some Pará and Bahia skins of the nominate race.

This form, while evidently a western race of *gilvicollis*, is quite distinct from *M. ruficollis guerilla*, likewise found in western Ecuador, and differs, in addition to the much shorter, one-banded tail, by paler, clear neutral gray upper parts without the least trace of brown on either scapulars or remiges, and much more closely and finely barred under surface, the dark bars being decidedly grayish, deep neutral gray rather than blackish. This barring, becoming narrower, extends along the flanks to the tibial feathers, but leaves the anal region and under tail coverts wholly immaculate white.

Additional material examined.—Northwestern Ecuador, Prov. Esmeraldas: Rio Bogotá, 2; Bulún, 1.—C.E.H.

***Daptrius ater** Vieillot. BLACK CARACARA.

Daptrius ater Vieillot, Anal. Nouv. Orn. Élém., p. 68, April, 1816—"Brésil" (descr. of adult); idem, Nouv. Dict. Hist. Nat., nouv. éd., **16**, p. 387, Dec. 27, 1817 (type stated to be in the Paris Museum); idem and Oudart, Gal. Ois., **1**, (1), p. 19, pl. 5, 1820 (fig. of type); Cabanis, in Schomburgk, Reisen Brit. Guiana, **3**, "1848," p. 742, 1849—savanna; Peters, Proc. Biol. Soc. Wash., **44**, p. 24, 1931 (range); idem, Bds. World, **1**, p. 278, 1931 (range); Pinto, Rev. Mus. Paul., **22**, p. 86, 1938—Rio Juruá and Santarem, Brazil; Dugand, Caldasia, **1**, No. 3, p. 58, 1941—Llanos del Meta, Colombia; idem, Rev. Acad. Colomb. Cienc., Bogotá, **4**, p. 397, pl. 4, fig. 22, 1941—Colombia; Gyldenstolpe, K. Svensk. Vetensk. Akad. Handl., (3), **22**, p. 37, 1945—João Pessõa, Rio Juruá (var. Amazonian loc.); idem, l.c., **23**, p. 55, 1945—El Desierto, El Beni, Bolivia.

Daptrius striatus (Vieillot MS.) Dumont, Dict. Sci. Nat., **7**, p. 10, 1817 (descr. of young; type in Paris Museum); Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **16**, p. 387 (in text), Dec. 27, 1817 (descr. of young).

Falco aterrimus Temminck, Nouv. Rec. Pl. Col., livr. 7, pls. 37 (adult), 342 (young), Feb., 1821—"Brésil et la Guiane" (type in Paris Museum).

Gymnops aterrimus Spix, Av. Spec. Nov. Bras., **1**, p. 11, 1824—Amazon River.

Gymnops fasciatus Spix, Av. Spec. Nov. Bras., **1**, p. 10, pl. 9, 1824—"prope ripam flum. Juruá," Brazil (descr. of young; type lost, formerly in Munich Museum; cf. Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **22**, No. 3, p. 570) (crit.).

Milvago aterrimus Burmeister, Syst. Uebers. Th. Bras., **2**, (1), p. 39, 1855—Guiana and Colombia to Brazil (Rio Juruá).

Ibycter ater Schlegel, Mus. Pays-Bas, No. 9, Polybori, p. 7, 1862—Cayenne and Surinam; Pelzeln, Verh. Zool. Bot. Ges. Wien, **12**, pp. 135, 176, 1862—Matto Grosso (Engenho do Cap Gama, [Villa Bella de] Matto Grosso), Rio Negro, and Barra, Brazil (soft parts); Sclater and Salvin, Proc. Zool. Soc. Lond., 1866, p. 198—upper Ucayali, Peru; Pelzeln, Orn. Bras., **1**, p. 2, 1867—Matto Grosso (Engenho do Cap Gama, [Villa Bella de] Matto Grosso), Rio Negro, and Barra, Brazil; Sclater and Salvin, Proc. Zool. Soc. Lond., 1867, pp. 589, 979—Pará, Brazil and Pebas, Peru; iidem, l.c., 1873, p. 301—upper Ucayali and Pebas, Peru; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 35, 1874 (monog.); Taczanowski, Orn. Pér., **1**, p. 103, 1884—Peru (upper Ucayali, Pebas); Salvin, Ibis, 1886, p. 78—British Guiana (ex Schomburgk); Allen, Bull. Amer. Mus. N. H., **2**, p. 105, 1889—lower Beni, Bolivia; Berlepsch and Hartert, Nov. Zool., **9**, p. 111, 1902—Temblador and Nicare, Caura, Venezuela; Ihering, Cat. Faun. Braz., **1**, p. 83, 1907—Rio Juruá (crit.); Hellmayr, Nov. Zool., **14**, p. 405, 1907—Borba, Rio Madeira; Snethlage, Journ. Orn., **56**, p. 22, 1908—Rio Purús (Bom Lugar, Monte Verde) and Monte Alegre, Brazil; Berlepsch, Nov. Zool., **15**, p. 289, 1908—Cayenne; Beebe, Zoologica (N.Y.), **1**, p. 79, 1909—La Brea, Orinoco Delta, Venezuela; Hellmayr, Nov. Zool., **17**, p. 409, 1910—Calama, Rio Madeira; idem, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **26**, No. 2, p. 96, 1912—Pará; Snethlage, Bol. Mus. Goeldi, **8**, p. 124, 1914—Cussary, Rio Jamauchim and Rio Purús (Bom Lugar, Monte Verde); Cherrie, Sci. Bull., Mus. Brookl.

Inst., 2, p. 341, 1916—Orinoco region (La Brea, Delta; Temblador and Nicare, Caura); Chubb, Bds. Brit. Guiana, 1, p. 215, 1916—Ituribisi River, Supenaam, Bartica, Camacabra Creek, Hoobaboo River, and Tiger Creek; Swann, Syn. List Accip., p. 8, 1919—Amazonia; idem, Syn. Accip., p. 13, 1921—Amazonia; idem, Monog. Bds. Prey, 1, p. 75, 1925 (monog.); Chapman, Bull. Amer. Mus. N. H., **55**, p. 220, 1926—Rio Suno, Ecuador; Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **12**, p. 452, 1929—Tury-assú, Maranhão; Naumburg, Bull. Amer. Mus. N. H., **60**, p. 103, 1930—Rio Roosevelt, Matto Grosso.

Ibycter (*Daptrius*) *ater* Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., 1, No. 6, 2nd ser., p. 472, 1876 (monog.).

Ibycter fasciatus Ihering, Rev. Mus. Paul., 6, "1904," p. 400, 1905—Rio Juruá (crit.).

Range.—The Guianas and southern Venezuela (Orinoco basin) west to the eastern base of the east Colombian Andes, and south through Brazilian Amazonia to northeastern Peru, northern Matto Grosso, northeastern Bolivia (Esperanza; lower Beni),[1] and northern Maranhão (Tury-assú).[2]

Field Museum Collection.—27: Colombia (Mitu, Vaupes, 1; Apiay, Llanos del Meta, 1; Morelia, Caqueta, 2); Ecuador (Rio Conumbo, Napo-Pastaza, 2); Peru (Rioja, San Martin, 1); Venezuela (Orope, Tachira, 1); British Guiana (Maspapu, 1; Kalakoon, 1; Rockstone, 1); Brazil (Conceicao, Amazonas, 2; Serra da Lua, Amazonas, 1; Igarape Aniba, Amazonas, 5; Itacoatiara, Rio Amazonas, 1; Lago do Baptista, Amazonas, 1; Lago de Serpa, Amazonas, 1; Santo Antonio, Amazonas, 1; Piquiatuba, Pará, 1; Obidos, Pará, 1; Caxiricatuba, Rio Tapajoz, 1; Tury-assú, Maranhão, 1).

[1] To *D. ater* probably belongs *Ibycter gymnocephalus* d'Orbigny (Voy. Amér. Mérid., Ois., livr. 2, p. 50, 1835—plains of Moxos, Bolivia; Lafresnaye and d'Orbigny, Syn. Av., 1, in Mag. Zool., 7, cl. 2, p. 2, 1837—"Cochabamba," Bolivia), described from field observation without the actual taking of specimens (cf. Hellmayr, Nov. Zool., 28, p. 174, 1921). The Black Caracara was secured by H. H. Rusby on the lower Beni and an adult shot by Goodfellow at Esperanza, in the same general district of Bolivia, differs nowise from Guianan specimens.

[2] Souza's record from Rio Grande do Sul (cf. Pelzeln, Orn. Bras., 4, p. 392, 1870) is unquestionably erroneous (cf. Ihering, Ann. Est. Rio Grande do Sul, 16, p. 139, 1900).

Young birds have, in addition to buffy edges on throat and belly, the basal half of the tail buffy, crossed by a varying number of black bands. Such an individual was described by Spix as *Gymnops fasciatus*, though a name for this stage already existed in *Daptrius striatus* Dumont. We have seen several specimens from British Guiana.

Additional material examined.—British Guiana: Ituribisi River, 1; Tiger Creek, 1; Supenaam, 1; Hoobaboo River, 1; Demerara, 2; Camacabra Creek, 1; Catto River, 1; Bartica Grove, 1; Rio Rupununi, 2; Annai, 1; unspecified, 2.—Brazil: Obidos, 1; Pará, 2; Manáos, 1.—Colombia: "Bogotá," 2.—Ecuador: Sarayacu, 2.—Peru: Pebas, 1.—Bolivia: Esperanza, 1.

***Daptrius americanus guatemalensis** (Swann).[1] NORTHERN RED-THROATED CARACARA.

Ibycter americanus guatemalensis Swann, Syn. Accip., p. 14, Sept. 28, 1921—Guatemala (type in coll. of H. K. Swann, now in Museum of Comparative Zoology, Cambridge, Mass.); idem, Monog. Bds. Prey, **1**, p. 78, 1925 (monog.); Griscom, Bull. Amer. Mus. N. H., **64**, p. 149, 1932—Finca El Espino, Guatemala; Huber, Proc. Acad. Nat. Sci. Phila., **84**, p. 211, 1932—Turkey River and Santa Rosita, Nicaragua.

Ibycter americanus (not *Falco americanus* Boddaert) Sclater and Salvin, Ibis, 1859, p. 214—Pacific region of Guatemala; Taylor, l.c., 1860, p. 223—Taulevi, Honduras; Lawrence, Ann. Lyc. Nat. Hist. N. Y., **7**, p. 288, 1861—Panama Railroad; Sclater and Salvin, Proc. Zool. Soc. Lond., 1864, p. 369—Lion Hill, Panama; Lawrence, Ann. Lyc. Nat. Hist. N. Y., **9**, p. 132, 1868—San José, Costa Rica; Frantzius, Journ. Orn., **17**, p. 367, 1869—Guaitíl and Guanacaste, Costa Rica; Salvin, Proc. Zool. Soc. Lond., 1870, p. 214—Mina de Chorcha, Chiriquí; Sclater and Salvin, l.c., p. 838—Honduras; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 35, 1874—part, Central America (spec. e, Veragua); Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., (2), **1**, No. 6, p. 470, 1876—part, Panama Railroad, Chiriquí, and Costa Rica (Talamanca); Nutting, Proc. U. S. Nat. Mus., **6**, p. 408, 1884—Los Sábalos, Nicaragua; Zeledón, Anal. Mus. Nac. Costa Rica, **1**, p. 125, 1887—Costa Rica (Jiménez, Tacares de Alajuéla, Pózo Azúl de Pirrís); Lantz, Trans. Kans. Acad. Sci., **16**, p. 219, 1899—Naránjo, Guatemala; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 128, 1901—part, Guatemala (Savana Grande, Retalhuleu) to Panama (Lion Hill); Bangs, Auk, **18**, p. 358, 1901—Divalá, Chiriquí; idem, Proc. New Eng. Zool. Cl., **3**, p. 19, 1902—Bogaba, Chiriquí; Carriker, Ann. Carnegie Mus., **6**, p. 451, 1910—Costa Rica (Bonilla, Pózo Azúl de Pirrís, Cariblanco de Sarapiquí, El Hogar); Stone, Proc. Acad. Nat. Sci. Phila., **70**, p. 248, 1918—Rio Indis, Gatún, Panama; Swann, Syn. List Accip., p. 8, 1919—part, Central America; Rendahl, Ark. Zool., **12**, No. 8, p. 10, 1919—Pacuare, Costa Rica.

Daptrius americanus americanus Peters, Bull. Mus. Comp. Zool., **71**, p. 308, 1931—Almirante, Panama.

Daptrius americanus guatemalensis Peters, Proc. Biol. Soc. Wash., **44**, p. 25, 1931—Guatemala to the Canal Zone (crit.); idem, Bds. World, **1**, p. 278, 1931 (range); Griscom, Bull. Mus. Comp. Zool., **78**, p. 302, 1935—Panama east to Canal Zone; Aldrich, Sci. Pub. Cleveland Mus. N. H., **7**, p. 50, 1937—Paracoté, Azuero, Panama (crit.).

Range.—Tropical zone of Central America from Guatemala to the Canal Zone, Panama.

Field Museum Collection.—5: Guatemala (Concepción del Mar, Escuintla, 1; Tiquisate, Escuintla, 1); Costa Rica (San Carlos, Alajuela, 1); Panama (Bogaba, Chiriquí, 1; Veraguas, 1).

[1] *Daptrius americanus guatemalensis* (Swann), a very poor race, merely differs from the nominate form by on average larger size, though this does not hold in a good many individuals. Wing (males): 350, Lion Hill; 355, 360, Chiriquí;

***Daptrius americanus americanus** (Boddaert). RED-THROATED CARACARA.

Falco americanus Boddaert, Tabl. Pl. Enl., p. 25, 1783—based on "Le Petit Aigle d'Amérique" Daubenton, Pl. Enl., pl. 417, Cayenne.

Falco aquilinus Gmelin, Syst. Nat., **1**, (1), p. 280, 1788—based on "Petit Aigle d'Amérique" Buffon and Daubenton (pl. 417), and "Red-throated Falcon" Latham, Gen. Syn. Bds., **1**, (1), p. 97, Cayenne.

Falco formosus Latham, Ind. Orn., **1**, p. 38, 1790—new name for *Falco aquilinus* Gmelin; Shaw and Nodder, Natur. Misc., **12**, pl. 485, 1801.

Falco nudicollis Daudin, Traité Élém. d'Orn., **2**, pp. 79, 177, 1800—"Cayenne et toute la Guiane, ... aussi à l'île de Trinidad" (errore) (type in Paris Museum); Wied, Beitr. Naturg. Bras., **3**, (1), p. 153, 1830—Rio Pardo, Barra da Vareda, and Ilhéos, Bahia (habits); Schomburgk, Reisen Brit. Guiana, **2**, p. 365, 1848—above Aripai, Rio Rupununi.

Ibycter leucogaster Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **29**, p. 9, 1819—new name for *Falco formosus* Lath. and *Falco aquilinus* "Lin." [=Gmelin]; idem and Oudart, Gal. Ois., **1**, (1), p. 20, pl. 6, 1820—Guiana.

Gymnops aquilinus Spix, Av. Spec. Nov. Bras., **1**, p. 11, 1824—in provincia Piauhy, Brazil.

Ibycter aquilinus Cabanis, in Schomburgk, Reisen Brit. Guiana, **3**, p. 742, 1849—Aruka River; Cassin, Proc. Acad. Nat. Sci. Phila., 1860, p. 133—Turbo and Rio Truando, Colombia.

Milvago nudicollis Burmeister, Syst. Uebers. Th. Bras., **2**, (1), p. 37, 1855—Pará.

Ibycter americanus Sclater, Proc. Zool. Soc. Lond., **25**, p. 16, 1857—Bogotá; idem, l.c., **26**, p. 451, 1858—Gualaquiza, Ecuador; Schlegel, Mus. Pays-Bas, Polybori, p. 9, 1862—Surinam and Cayenne; Pelzeln, Verh. Zool. Bot. Ges. Wien, **12**, pp. 134, 176, 1862—São Paulo (Rio Paraná), Matto Grosso (Engenho do Gama, [Villa Bella de] Matto Grosso), and Rio Madeira (Borba); idem, Orn. Bras., **1**, p. 2, 1867—same localities; Sclater and Salvin, Proc. Zool. Soc. Lond., 1866, p. 198—upper Ucayali, Peru; iidem, l.c., 1867, pp. 589, 753—Pará, Brazil and Chyavetas, Peru; iidem, l.c., 1873, p. 301—upper Ucayali and Chyavetas, Peru; Taczanowski, l.c., 1874, p. 550—Monterico, Ayacucho, Peru; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 35, 1874—part, Amazonia, Ecuador, and Colombia; Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., (2), **1**, No. 6, p. 470, 1876—part, Colombia (Truando) and Ecuador (Guayaquil); Sclater and Salvin, Proc. Zool. Soc. Lond., 1879, p. 541—Medellin, Remedios, and Rio Neche, Antioquia, Colombia; Taczanowski, Orn. Pér., **1**, p. 103, 1884—Peru (Monterico, upper Ucayali, Chyavetas); Salvin, Ibis, 1886, p. 77—Bartica Grove and Camacusa, British Guiana; Allen, Bull. Amer. Mus. N. H., **5**, p. 148, 1893—Chapada, Matto Grosso; Ihering, Rev. Mus. Paul., **3**, p. 344, 1899—São Paulo; Salvadori and Festa, Boll. Mus. Zool. Torino, **15**, No. 368, p. 27, 1900—Rio Zamora, Ecuador; Berlepsch and Stolzmann, Proc. Zool. Soc. Lond., 1902, (2), p. 42—Chanchamayo,

378, Costa Rica (Peje); 375, Guatemala (Retalhuleu). Two adult females from Guatemala (Savanna Grande) have wings of 380 and 385.

Junín, Peru; Berlepsch and Hartert, Nov. Zool., **9**, p. 112, 1902—Perico, Orinoco, and Rapids of Piritu, Caura, Venezuela; Hartert, l.c., **9**, p. 605, 1902—San Javier, Esmeraldas, Ecuador; Goeldi, Ibis, 1903, p. 497—Rio Capim, Pará; Ménégaux, Bull. Mus. Hist. Nat. Paris, **10**, p. 108, 1904—St. Georges d'Oyapock, French Guiana; Ihering, Rev. Mus. Paul., **6**, "1904," p. 450, 1905—Rio Juruá, Brazil; idem, Cat. Faun. Braz., **1**, p. 83, 1907—São Paulo (Itapura, Rio Feio, Salto Grande do Paranapanema) and Amazonas (Rio Juruá); Berlepsch, Nov. Zool., **15**, p. 289, 1908—Cayenne and St. Georges d'Oyapock, French Guiana; Hellmayr, l.c., **17**, p. 409, 1910—Borba, Rio Madeira; idem, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **26**, No. 2, pp. 77, 96, 1912—Jambú-assú, Pará; Snethlage, Bol. Mus. Goeldi, **8**, p. 124, 1914—Pará, Peixe-Boi, Rio Guamá (Ourém), Rio Capim, Rio Mojú, and Rio Jamauchim (Santa Helena), Brazil; Cherrie, Sci. Bull., Mus. Brookl. Inst., **2**, p. 341, 1916—Rapids of Apures and Maipures, Orinoco; Chubb, Bds. Brit. Guiana, **1**, p. 216, 1916—Ituribisi River, Bartica, Camacabra River, Cako River, Demerara, and Camacusa; Chapman, Bull. Amer. Mus. N. H., **36**, p. 239, 1917—Salaquí, Puerto Valdivia, and La Morelia, Colombia; Bangs and Penard, Bull. Mus. Comp. Zool., **62**, p. 35, 1918—near Tweede Rijweg, Surinam; Swann, Syn. List Accip., p. 8, 1919—part, South America; Lönnberg and Rendahl, Ark. Zool., **14**, No. 25, p. 29, 1922—near Napo Village, road to Gualea, and Alonguinche (south of Mojanda), Ecuador; Todd and Carriker, Ann. Carnegie Mus., **14**, p. 164, 1922—Tucurinca, Santa Marta, Colombia; Stone, Proc. Acad. Nat. Sci. Phila., **80**, p. 154, 1928—Castanhal, Pará.

Ibycter formosus Pelzeln, Verh. Zool. Bot. Ges. Wien, **12**, p. 176, 1862—Cayenne and São Paulo (Ypanemá and Goyabeira) (soft parts); idem, Orn. Bras., **1**, p. 2, 1867—same localities.

Ibicter americanus Reiser, Denks. Math.-Naturw. Kl. Akad. Wiss. Wien, **76**, p. 88, 1910—Piauhy (Santa Philomena) and Maranhão (Barroca do Maranhão).

Ibycter americanus americanus Swann, Syn. Accip., p. 14, 1921 (range); Bangs and Barbour, Bull. Mus. Comp. Zool., **65**, p. 194, 1922—Jesusito, Darien; Swann, Monog. Bds. Prey, **1**, p. 77, 1925 (monog.); Chapman, Bull. Amer. Mus. N. H., **55**, p. 220, 1926—Esmeraldas, Pato de Pájaro, Rio de Oro, Rio Suno, and below San José, Ecuador; Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **12**, p. 452, 1929—Maranhão (Grajahú; Fazenda Inhuma, Alto Parnahyba) (crit.); Griscom, Bull. Mus. Comp. Zool., **69**, p. 157, 1929—Cana, Darien; Naumburg, Bull. Amer. Mus. N. H., **60**, p. 103, 1930—Rio Roosevelt, Matto Grosso; Griscom, Bull. Mus. Comp. Zool., **72**, p. 318, 1932—Obaldia and Ranchon, Darien.

Ibycter americanus formosus Swann, Monog. Bds. Prey, **1**, p. 78, 1925—southern Brazil.

Daptrius americanus americanus Peters, Proc. Biol. Soc. Wash., **44**, p. 25, 1931 (crit.); idem, Bds. World, **1**, p. 279, 1931 (range); Griscom, Bull. Mus. Comp. Zool., **78**, p. 302, 1935—extreme eastern Panama; Pinto, Rev. Mus. Paul., **20**, p. 50, 1936—Rio das Almas, Goyáz (crit.); idem, l.c., **22**, p. 87, 1938—Rio Juruá, Rio Pardo (Bahia), Rio das Almas (Goyáz), Rio Feio, Itapura, and Salto Grande (São Paulo), Brazil; Gyldenstolpe,

K. Svensk. Vetensk. Akad. Handl., (3), **22**, p. 37, 1945—Brazil (João Pessõa and Santo Antonio, Rio Juruá; var. Amazon loc.) (disc.).

Daptrius americanus Dugand, Rev. Acad. Colomb. Cienc., Bogotá, **4**, p. 397, pl. 4, fig. 24, 1941—Colombia.

Range.—Tropical South America from extreme eastern Panama (Darien) south to central Peru (depts. Junín and Ayacucho) and through Venezuela and the Guianas south to Matto Grosso and São Paulo, Brazil.[1]

Field Museum Collection.—26: Colombia (Rio Jurado, Choco, 3; Serra de Baudo, 1; Laticia, Amazonas, 1); Ecuador (Lambarandon, Guayas, 1); Peru (Yurimaguas, Loreto, 1); Venezuela (Rio Catatumbo, Zulia, 1); British Guiana (Mazaruni River, 1; Demerara River, 1; Hyde Park, 1; Itabu Creek, Middle Base Camp, 1; Itabu Creek, Head Boundary Camp, 1); Brazil (Labrea, Rio Purús, 1; San Antonio, Rio Eiru, 1; Igarape da Gordao, Amazonas, 1; João Pessõa, Rio Juruá, 2; Igarape Aniba, Amazonas, 3; Taparinha, Pará, 1; Piquiatuba, Pará, 2; Grajahu Liberia, Maranhão, 1; Inhuma, Alto Parnahyba, Maranhão, 1).

Genus **MILVAGO** Spix[2]

Milvago Spix, Av. Spec. Nov. Bras., **1**, p. 12, 1824—type, by monotypy, *Milvago ochrocephalus* Spix=*Polyborus chimachima* (Vieillot).

*Milvago chimango chimango (Vieillot). CHIMANGO CARACARA.

Polyborus chimango Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **5**, p. 260, Dec. 14, 1816—based on "Chimango" Azara, No. 5, rare in Paraguay, but common on the La Plata River;[3] d'Orbigny, Voy. Amér. Mérid., Ois., p. 60, 1835—Argentina and coast of Chile and "Peru" (=Arica, Tacna); Philippi, Reise Wüste Atacama, p. 161, 1860—Quebrada de la Encantada, Atacama, Chile; Schlegel, Mus. Pays-Bas, livr. 2, Polybori, p. 6, 1862—

[1] The supposedly larger size of specimens from eastern and southern Brazil proves to be non-existent. Two adult females from Rio de Janeiro and São Paulo respectively have wings of 360 and 365 mm., thus agreeing with the maximum figures of Guianan birds.

Additional material examined.—French Guiana: Cayenne, 1.—Dutch Guiana: Maroni River, 1.—British Guiana: Camacusa, 1; Bartica Grove, 3; Cako River, 1; Demerara, 2; Camacabra River, 2; Ituribisi, 2; Moraballi, Essequibo River, 1.—Venezuela: Palmar, Mérida, 1.—Colombia: Neche, 1.—Ecuador: Guayaquil, 1; Sarayacu, 2.—Peru: Rio Perené, Junín, 1.—Brazil: Pará, 1; Manáos, 1; Santa Philomena, Piauhy, 1; Barroca do Maranhão, Rio Parnahyba, Maranhão, 1; Rio de Janeiro, 1; Ypanemá, São Paulo, 1.

[2] Cf. Sushkin, Nouv. Mém. Soc. Natur. Moscou, **16**, livr. 4, p. 181, 1905 (osteol.; morph.).

[3] La Plata River designated as type locality by Brodkorb (Proc. Biol. Soc. Wash., **52**, p. 83, 1939).

Paraguay and Chile; Philippi, Ornis, **4**, p. 158, 1888—Quebrada de la Encantada, Atacama.

Aquila pezopora Meyen, Nov. Act. Acad. Caes. Leop.-Carol. Nat. Cur., **16**, Suppl., p. 62, pl. 16, 1834—plains of Mapocho, particularly in the vicinity of Santiago, Chile (type in Berlin Museum).

Milvago chimango Darwin, Zool. Beagle, **3**, Birds, p. 14, 1838—part, Maldonado, Uruguay; Peale, U. S. Expl. Exp., **8**, p. 61, 1848—Chile; Bibra, Denks. Math.-Naturw. Kl. Akad. Wiss. Wien, **5**, p. 128, 1855—road from Valparaiso to Santiago, Chile; Cassin, in Gilliss, U. S. Ast. Exp., **2**, p. 174, 1855—Chile; Germain, Proc. Bost. Soc. N. H., **7**, p. 309, 1860—Santiago, Chile (breeding habits); Pelzeln, Reise Nov., Zool., **1**, Vögel, p. 61, 1865—Chile; Sclater, Proc. Zool. Soc. Lond., 1867, pp. 329, 338—Chile (in part); idem and Salvin, l.c., 1868, p. 143—Conchitas, Buenos Aires; Hudson, l.c., 1872, p. 536—Rio Negro (habits); Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., (2), **1**, No. 6, p. 467, 1876 (monog.; in part); Durnford, Ibis, 1876, p. 161—Buenos Aires; idem, l.c., 1877, pp. 40, 188—Chubut Valley and Baradero, Buenos Aires; Reed, Anal. Univ. Chile, **49**, p. 559, 1877—Cauquenes, Colchagua, Chile; Durnford, Ibis, 1878, p. 398—Chubut, Patagonia; Gibson, Ibis, 1879, p. 420—Cape San Antonio, Buenos Aires; Doering, in Roca, Exp. Rio Negro, Zool., p. 51, 1881—Rio Colorado and Rio Negro; Dalgleish, Proc. Roy. Phys. Soc. Edin., **6**, p. 237, 1881—Est. de la Tala, Uruguay (eggs descr.); White, Proc. Zool. Soc. Lond., 1882, p. 623—Salto and Punta Lara, Buenos Aires; Barrow, Auk, **1**, p. 111, 1884—Concepción del Uruguay, Entre Ríos; Taczanowski, Orn. Pér., **1**, p. 97, 1884—Arica, Peru (ex d'Orbigny); Gibson, Ibis, 1885, p. 282—Paysandú, Uruguay; Berlepsch and Ihering, Zeits. Ges. Orn., **2**, p. 172, 1885—Taquara, Rio Grande do Sul; Withington, Ibis, 1888, p. 470—Lomas de Zamora, Buenos Aires; Sclater and Hudson, Arg. Orn., **2**, p. 74, 1889 (habits); Stempelmann and Schulz, Bol. Acad. Nac. Córdoba, **10**, p. 396, 1890—Córdoba; Holland, Ibis, 1890, p. 425—Espartillar, Buenos Aires; Frenzel, Journ. Orn., **38**, p. 115, 1891—Córdoba; Holland, Ibis, 1892, p. 204—Espartillar, Buenos Aires (habits); Aplin, Ibis, 1894, p. 196—Uruguay (Santa Elena, Rio Negro, Santa Florencia); Koslowsky, Rev. Mus. La Plata, **6**, p. 285, 1895—Chilecito, La Rioja; Reed, Anal. Mus. Chile, **93**, p. 206, 1896—Chile (in part); Lane, Ibis, 1897, p. 181—part, central Chile; Gosse, in Fitz Gerald, The Highest Andes, p. 343, 1899—Puente del Inca, Mendoza; Albert, Anal. Univ. Chile, **108**, p. 296, 1901—Chile (in part); Lillo, Anal. Mus. Nac. Buenos Aires, **8**, p. 202, 1902—Rio Salí, Tucumán; Bruch, Rev. Mus. La Plata, **11**, p. 251, 1904—Orán, Salta; Baer, Ornis, **12**, p. 229, 1904—Tucumán; Lillo, Rev. Letr. Cienc. Soc., **3**, No. 13, p. 269, 1905—Rio Salí, Tucumán; Ihering, Cat. Faun. Braz., **1**, p. 84, 1907 (range); Hartert and Venturi, Nov. Zool., **16**, p. 238, 1909—Barracas al Sud and Tucumán; Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 241, 1910—Argentina (in part); Chubb, Ibis, 1910, p. 69—Ybitimí, Paraguay; Grant, l.c., 1911, p. 333—Los Yngleses, Ajó, Buenos Aires; Bertoni, Faun. Parag., p. 42, 1914—Paraguay; Scott and Sharpe, Rep. Princet. Univ. Exped. Patag., **2**, Orn., p. 582, 1915 (in part); Reed, Av. Mendoza, p. 20, 1916—Mendoza; Marelli, El Hornero, **1**, p. 77, 1918—Curuzú-Cuatiá, Corrientes; Dabbene, l.c., p. 95, 1918—Isla Martín Garcia, Buenos Aires; Sanzin, l.c., p. 149, 1918—Mendoza;

Chubb, Ibis, 1919, p. 279—Mendoza; Gibson, Ibis, 1919, p. 513—Cape San Antonio, Buenos Aires (habits); Swann, Syn. List Accip., p. 9, 1919 (in part); Tremoleras, El Hornero, **2**, p. 17, 1920—Uruguay (Canelones, Florida, Flores, San José, Maldonado, Minas, Cerro Largo); Renard, l.c., **2**, p. 59, 1920—Cañuelas, Buenos Aires; Barros, Rev. Chil. Hist. Nat., **24**, p. 48, 1920—Nilahué, Curicó, Chile; idem, l.c., **25**, p. 175, 1921—Precordillera of Aconcagua, Chile; Daguerre, El Hornero, **2**, p. 265, 1922—Rosas, Buenos Aires; Serié and Smyth, l.c., **3**, p. 43, 1923—Santa Elena, Entre Ríos; Giacomelli, l.c., **3**, p. 77, 1923—La Rioja; Pereyra, l.c., **3**, p. 164, 1923—Zelaya, Buenos Aires; Serié, l.c., **3**, p. 189, 1923—Cacharí, Buenos Aires; Wilson, l.c., **3**, p. 192, 1923 (habits); Daguerre, l.c., **3**, p. 252, 1924—Rosas (habits); Ménégaux, Rev. Franç. d'Orn., 1925, p. 283—Colonia Dora, Santiago del Estero; Housse, Rev. Chil. Hist. Nat., **29**, p. 142, 1925—San Bernardo, Santiago, Chile; Wilson, El Hornero, **3**, p. 355, 1926—Venado Tuerto, Santa Fé; Marelli, Mem. Min. Obr. Públ. for 1922–23, p. 628, 1927—Buenos Aires; Jaffuel and Pirion, Rev. Chil. Hist. Nat., **31**, p. 103, 1927—Marga-Marga Valley, Valparaiso, Chile; Castellanos, El Hornero, **5**, p. 8, 1932—Valle de los Reartes, Córdoba.

Milvago pezoporos Fraser, Proc. Zool. Soc. Lond., **11**, p. 109, 1843—Chile [=Colchagua]; Yarrell, l.c., **15**, p. 52, 1847—Chile (egg descr.); Burmeister, Journ. Orn., **8**, p. 241, 1860—Argentina; idem, Reise La Plata St., **2**, p. 434, 1861—from Banda Oriental to Mendoza; Holmberg, Nat. Arg., **1**, p. 94, 1870—Valle de Lerma, Salta; Doering, Period. Zool., **1**, p. 246, 1874—Barráncas, Rio Guayquiraro, Corrientes.

Caracara chimango Des Murs, in Gay, Hist.-Fís. Pol. Chile, Zool., **1**, p. 211, 1847—part, northern Chile; Philippi, Anal. Univ. Chile, **31**, p. 243, 1868—Chile (in part); Lataste, Act. Soc. Sci. Chil., **3**, pp. cxiv, cxv, 1894—Bureo (Chillan), Ñuble, and Ninhue (Itata), Maule, Chile; Waugh and Lataste, l.c., **4**, pp. lxxxiii, clxix, 1894—Peñaflor, Santiago, and San Alfonso (Quillota), Valparaiso; Lataste, l.c., **5**, p. lx, 1895—Itata, Maule, Chile.

Ibycter chimango Sharpe, Cat. Bds. Brit. Mus., **1**, p. 41, 1874 (in part); idem, Proc. Zool. Soc. Lond., 1881, p. 10—part, Talcaguano, Chile; Holmberg, Act. Acad. Nac. Córdoba, **5**, p. 75, 1884—Tandíl, Buenos Aires; Schalow, Zool. Jahrb., Suppl., **4**, p. 693, 1898—Coquimbo (La Serena) and Santiago, Chile; Ihering, Ann. Est. Rio Grande do Sul, **16**, p. 139, 1899—Mundo Novo and Pedras Brancas, Rio Grande do Sul.

Milvago chimango chimango Swann, Syn. Accip., p. 16, 1921 (in part); Paessler, Journ. Orn., **70**, p. 448, 1922—Coronel, Chile (breeding habits); Peters, Bull. Mus. Comp. Zool., **65**, p. 304, 1923—Rio Negro; Swann, Monog. Bds. Prey, **1**, p. 91, 1925 (excl. of Tierra del Fuego and Falkland Islands); Wetmore, Bull. U. S. Nat. Mus., **133**, p. 92, 1926—Buenos Aires (Guaminí, etc.), Santa Fé, Rio Negro (General Roca), Neuquén (Zapala), La Pampa (Victorica), Mendoza (Tunuyán), and Chile (Concon); idem, Univ. Calif. Pub. Zool., **24**, p. 420, 1926—Valcheta, Rio Negro and Lago Mosquitos (Cholila), Chubut; Friedmann, Bull. Mus. Comp. Zool., **68**, p. 156, 1927—Buenos Aires (Ajó Berisso, Dolores), Tucumán (San Pablo, Rio Lules, Concepción, Rio de Gastone), Entre Ríos (Santa Elena, Santa Sofia), etc.; Laubmann, Wiss. Erg. Deuts. Gran Chaco Exp., Vögel, p. 93, 1930—

La Germania and Gálvez, Santa Fé; Peters, Bds. World, **1**, p. 279, 1931 (range in part); Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **19**, p. 286, 1932—Chile (Atacama to Concepción); Marelli, El Hornero, **5**, p. 194, 1933—Sierra de la Ventana, Fortín Chaco, and Saldungaray, Buenos Aires; Laubmann, Verh. Orn. Ges. Bay., **20**, p. 285, 1934—Est. La Geraldina, Santa Fé; Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 465, 1936—Buenos Aires (La Plata, Bahía San Blas), Rio Negro, and Mendoza (Viluco).

Range.—Northern[1] and central Chile south to about Concepción; Paraguay;[2] Uruguay; extreme southern Brazil (Rio Grande do Sul),[3] and Argentina south to the Chubut River.

Field Museum Collection.—11: Chile, Concepción (Hacienda Gualpencillo, 2; Concepción, 1); Argentina (Concepción, Tucumán, 2; Noetinger, Cordoba, 1; Papin, Buenos Aires, 1; Estancia la Maria Luisa, Buenos Aires, 1); Uruguay (Dolores, Soriano, 1; Garzon, Rocha, 1; Piedra del Toro, Canelones, 1).

***Milvago chimango temucoensis** W. L. Sclater.[4] TEMUCO CARRION-HAWK.

Milvago chimango temucoensis W. L. Sclater, Bull. Brit. Orn. Cl., **38**, p. 43, March 4, 1918—Pelal, near Temuco, Cautín, Chile (type in British

[1] As far north as Arica, according to d'Orbigny, though more recently not found beyond Atacama. The Arica record is responsible for its inclusion in the Peruvian fauna. Tschudi expressly states having met with the bird only in Chile.

[2] Brodkorb (Proc. Biol. Soc. Wash., **52**, p. 83, June 5, 1939) has separated the Paraguayan birds under the name *Milvago chimango azarae* (type from 25 km. east of Rosario, Paraguay, in the Museum of Zoology, University of Michigan). It is said to be smaller than examples from Argentina and Chile; to have the pileum, back and upper wing coverts darker, more sooty (less reddish brown); the hind neck and sides of neck darker and grayer; the light bars on upper tail coverts much less rufous and the dark bars blacker; the breast and abdomen much darker and sootier (less reddish brown) and the shaft streaks to the feathers blackish, instead of brown, etc.

Unfortunately, there is no material in Field Museum for comparison but Dr. Hellmayr seemed to notice no difference in the four Paraguayan birds he examined.—B.C.

[3] Birds from central Chile, including two from Concepción and one from Talcaguano, seem to be inseparable from a topotypical Argentine series and others from Paraguay. Two adults from western Chubut (Lago Blanco) and one from Nahuel Huapi cannot be distinguished from numerous Buenos Aires specimens, and it appears therefore that the range of the nominate race extends down to the Chubut Valley. Two skins from Rio Grande do Sul are also quite typical.

Additional material examined.—Brazil, Rio Grande do Sul: Mundo Novo, 1; Pedras Brancas, 1.—Paraguay: Ybitimi, 1; Villa Rica, 3.—Argentina: Conchitas, Buenos Aires, 1; Los Ingleses, Ajó, 10; Lomas de Zamora, Buenos Aires, 1; Tuyú, Ajó, 1; Est. Espartillar, Buenos Aires, 1; Mendoza, 1; Nahuel Huapi, Rio Negro, 1; Valle del Lago Blanco, Chubut, 2.—Chile: Hacienda Mansel, near Hospital, Santiago, 1; Santiago, 1; central Chile, 7; Talcaguano, Concepción, 1.—C.E.H.

[4] *Milvago chimango temucoensis* W. L. Sclater: Easily distinguished by its richer, more saturated coloration, the brown of the back being decidedly darker,

Museum examined); Swann, Syn. Accip., p. 16, 1921—Chile; idem, Monog. Bds. Prey, **1**, p. 93, 1925—southern Chile; Laubmann, Wiss. Erg. Deuts. Gran Chaco Exp., Vögel, p. 94 (in text), 1930—Fundo Esmeraldo, Osorno, Llanquihue (crit.); Peters, Bds. World, **1**, p. 279, 1931—southern Chile; Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **19**, p. 287, 1932—Concepción to Straits of Magellan (crit.); Reynolds, Ibis, 1932, p. 36—Woodcock Island, Beagle Channel; idem, El Hornero, **5**, p. 348, 1934—Isla de los Conejos and Tierra del Fuego (Yewin); idem, Ibis, 1935, p. 78—Wollaston Island, Cape Horn; Bullock, Rev. Chil. Hist. Nat., **39**, p. 241, 1935—Isla la Mocha, Arauco, Chile; Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 468, 1936 (range); Castellanos, El Hornero, **6**, p. 386, 1937—Ushuaia, Tierra del Fuego.

Milvago chimango (not *Polyborus chimango* Vieillot) Darwin, Zool. Beagle, **3**, Birds, p. 14, 1838—part, Chiloé Island; Hartlaub, Naumannia, **3**, p. 209, 1853—Valdivia, Chile; Boeck, l.c., 1855, p. 496—Chiloé Island; Sclater, Proc. Zool. Soc. Lond., 1867, pp. 329, 338—Chile (in part); Sclater and Salvin, Ibis, 1868, p. 187—Sandy Point; iidem, Proc. Zool. Soc. Lond., 1878, p. 435—Puerto Bueno and Sandy Point, Straits of Magellan; Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., (2), **1**, No. 6, p. 467, 1876 (in part); idem, Proc. U. S. Nat. Mus., **12**, "1889," p. 136, Feb., 1890—Laredo Bay, Straits of Magellan; Oustalet, Miss. Sci. Cap Horn, **6**, p. B.15, 1891—Hoste Island (New Year Sound, Orange Bay), Wollaston Island (Gretton Bay), and Tierra del Fuego (Ushuaia); Reed, Anal. Univ. Chile, **93**, p. 206, 1896—Chile (in part); Salvadori, Ann. Mus. Civ. Stor. Nat. Genova, **40**, p. 613, 1900—Punta Arenas and Hoste Island, Beagle Channel; Dabbene, Anal. Mus. Nac. Buenos Aires, **8**, p. 354, 1902—Ushuaia, Tierra del Fuego; Crawshay, Bds. Tierra del Fuego, p. 7, 1907—Tierra del Fuego; Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 241, 1910—part, Patagonia and Tierra del Fuego; Scott and Sharpe, Rep. Princet. Univ. Exped. Patag., **2**, Orn., p. 582, 1915 (in part); Swann, Syn. List Accip., p. 9, 1919 (in part).

Milvago pezoporos (not *Aquila pezopora* Meyen) Darwin, Zool. Beagle, **3**, Birds, p. 13, 1838—(?)Port Desire, Patagonia, and (certè) Tierra del Fuego.

Polyborus chimango Tschudi, Peru. Reiseskizzen, **1**, p. 6, 1846—Ancud, Chiloé Island; idem, Faun. Peru., Orn., p. 79, 1846—part, southern Chile and Chiloé Island.

and the chest of a deeper rufous brown, while the transverse barring underneath is much more strongly marked and extends down to the tibial feathers.

Birds from the Straits of Magellan and Tierra del Fuego are identical with the typical series from Temuco, and it is strange that Swann, when writing the account of these birds, did not recognize this fact.

The labels of the Darwinian specimens in the British Museum probably have been transposed, since the bird said to be from "Maldonado, Uruguay" certainly is referable to *M. c. temucoensis*, while the one labeled "Port Desire" is an exceedingly well-marked, pale example of the nominate race.

Additional material examined.—Chile: Maquegua, Arauco, 1; Maquehue, Temuco, 4; Pelal, Temuco, 1; Corral, Valdivia, 1; Osorno, Llanquihue, 4.—Straits of Magellan: Elizabeth Island, 1; Puerto Bueno, 2; Cockle Cove, 1; Molineux Sound, Smythe's Channel, 1; Sandy Point, 1.—Tierra del Fuego: Viamonte, 1.

Caracara chimango Des Murs, in Gay, Hist. Fís. Pol. Chile, Zool., **1**, p. 211, 1847—part, southern Chile to Straits of Magellan; Philippi, Anal. Univ. Chile, **31**, p. 243, 1868—Chile (in part).

Ibycter chimango Sharpe, Cat. Bds. Brit. Mus., **1**, p. 41, 1874 (in part); idem, Proc. Zool. Soc. Lond., 1881, p. 10—part, Cockle Cove, Straits of Magellan; Nicoll, Ibis, 1904, p. 44—Molineux Sound, Smythe's Channel.

Range.—Forested zone of southern Chile, from Concepción south to the Straits of Magellan, Tierra del Fuego, and Cape Horn Islands.[1]

Field Museum Collection.—4: Chile (Curacautin, Cautin, 1; Pucon, Cautin, 1; Rio Inio, Chiloe Island, 1; Quellon, Chiloe Island, 1).

***Milvago chimachima cordatus** Bangs and Penard.[2] PANAMA CARACARA.

Milvago chimachima cordata(us) Bangs and Penard, Bull. Mus. Comp. Zool., **62**, p. 35, April, 1918—San Miguel Island, Bay of Panama (type in Museum of Comparative Zoology, Cambridge, Mass.); Swann, Syn. Accip., p. 15, 1921—Panama; Todd and Carriker, Ann. Carnegie Mus., **14**, p. 163, 1922—Bonda, Santa Marta, Colombia; Swann, Monog. Bds. Prey, **1**, p. 89, 1925—Panama to British Guiana; Peters, Bds. World, **1**, p. 279, 1931 (range); Darlington, Bull. Mus. Comp. Zool., **71**, p. 369, 1931—Rio Frio, Magdalena, Colombia; Griscom, Auk, **50**, p. 303, 1933—Rio Chepo, Darien; idem, Bull. Mus. Comp. Zool., **78**, p. 302, 1935—[arid tropical zone of] Pacific slope of Panama; Aldrich, Sci. Pub. Cleveland Mus. N. H., **7**, p. 51, 1937—Paracoté, Azuero Peninsula, Panama; Murphy, Auk, **62**, p. 116, 1945—Panama (San Miguel and La Vivienda, Pearl Islands).

Milvago chimachima (not *Polyborus chimachima* Vieillot) Cabanis, in Schomburgk, Reisen Brit. Guiana, **3**, "1848," p. 742, 1849—savanna; Pelzeln,

[1] There is no record of the occurrence of this hawk in the Falkland Islands, and Swann's note on its breeding there must be due to confusion. Bennett, whom he quotes as authority, does not list the species at all in his papers (Ibis, 1926, pp. 306–333; 1931, pp. 12–13).

[2] *Milvago chimachima cordatus* Bangs and Penard is a very poor race. While most of the alleged characters (browner upper parts; color of upper tail coverts and under wing coverts) do not hold at all, it cannot be denied that birds from Panama to the Amazon are generally of a more deeply buffy coloration underneath, if specimens in corresponding plumage be compared. Single individuals, however, are not always distinguishable, one from Rio de Janeiro and another from São Paulo being just as deeply buff below as any *cordatus*. Birds from British Guiana and Obidos compare well with those of Panama and Colombia.

We cannot perceive any constant difference between the various races in the color of the light streaking in the juvenile plumage nor does size offer a reliable criterion for their segregation.

Additional material examined.—Panama: Calóbre, Veraguas, 2; Chepo, 1; Bay of Panama, 1.—Colombia: Valencia, Santa Marta, 2; Cauca, 1; Jiménez, 1; Anolaima, 1; Bogotá, 3.—Venezuela: La Ortiza (San Cristóbal), Tachira, 1; Caracas, 1.—British Guiana: Abary River, 4; Manarica, 1; Supenaam, 1; Ituribisi, 1; Waremia, 1; Demerara, 1; Essequibo River, 1; Upper Takutu Mountains, 2; unspecified, 1.—Brazil: Obidos, 1; Manáos, 1.

Verh. Zool. Bot. Ges. Wien, **12**, p. 177, 1862—part, Barra do Rio Negro; idem, Orn. Bras., **1**, p. 2, 1867—part, Barra do Rio Negro; Sclater and Salvin, Proc. Zool. Soc. Lond., 1867, p. 569—part, Barra do Rio Negro; Salvin, l.c., 1870, p. 214—Calóbre, Veraguas; Wyatt, Ibis, 1871, p. 382—eastern Andes of Colombia (Santander); Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., (2), **1**, No. 6, p. 468, 1876—part, Calóbre, Veragua; Sclater and Salvin, Proc. Zool. Soc. Lond., 1879, p. 541—Cauca, Colombia; Salvin and Godman, Ibis, 1880, p. 177—Valencia, Santa Marta, Colombia; Berlepsch, Journ. Orn., **32**, p. 316, 1884—Bucaramanga, Colombia; Salvin, Ibis, 1886, p. 79—Merumé Mountains, British Guiana; Robinson, Flying Trip to Tropics, p. 155, 1895—Barranquilla, Colombia; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 127, 1901—Panama (Calóbre, Chepo, Bay of Panama); Berlepsch and Hartert, Nov. Zool., **9**, p. 112, 1902—Altagracia, Caicara, Quiribana de Caicara, and Ciudad Bolivar, Venezuela; Bangs, Proc. New Eng. Zool. Cl., **2**, p. 20, 1902—Sona, Chiriquí; Thayer and Bangs, Bull. Mus. Comp. Zool., **46**, p. 144, 1905—San Miguel and Saboga Island, Pearl Archipelago; Snethlage, Bol. Mus. Goeldi, **8**, p. 124, 1914—part, Jg. de Paituna, Brazil; Chubb, Bds. Brit. Guiana, **1**, p. 217, 1916—Upper Takutu River, Ituribisi, Bonasika, Abary River, Anarika River, Essequibo, and Merumé Mountains; Cherrie, Sci. Bull., Mus. Brooklyn Inst., **2**, p. 341, 1916—Orinoco region, Venezuela; Chapman, Bull. Amer. Mus. N. H., **36**, p. 239, 1917—Colombia (San Antonio; Cali; La Manuelita; La Palma; Chicoral, Honda, and Calamar, Magdalena Valley; Barrigon); Swann, Syn. List Accip., p. 9, 1919 (in part); Rendahl, Ark. Zool., **13**, No. 4, p. 19, 1920—Viveros, Trapiche, and San José Island, Pearl Archipelago; Young, Ibis, 1929, p. 6—coastland of British Guiana (nest, eggs); Dugand, Rev. Acad. Colomb. Cienc., Bogotá, **4**, p. 397, pl. 4, fig. 23, 1941—Colombia.

Milvago chimango (lapsu) Sclater and Salvin, Proc. Zool. Soc. Lond., 1869, p. 252—Lake of Valencia, Venezuela.

Milvago chimachima chimachima Swann, Syn. Accip., p. 15, 1921—part, Panama to Guiana.

Range.—Panama (including the Pearl Islands) south to Colombia and east through Venezuela to British Guiana and southward to the north bank of the Amazon (Obidos; Manáos).

Field Museum Collection.—29: Colombia (Cali, Cauca, 1; San Antonio, Cauca, 1; El Tambo, Cauca, 8; Rio Patio, Narino, 1; Cucuta, Santander, 1); Venezuela (Maracay, Aragua, 2; Colon, Tachira, 1); British Guiana (Georgetown, 2; Kingston, 1; Buxton, 2); Brazil (Bõa Vista, Rio Branco, Amazonas, 2; Itacoatiara, Amazonas, 1; Obidos, Pará, 2; Igarape Aniba, 4).

Milvago chimachima paludivagus Penard.[1] SURINAM CARACARA.

[1] *Milvago chimachima paludivagus* Penard: Stated to be similar to *M. c. cordatus* but perhaps smaller, with the upper parts more blackish, less brownish. Wing, (male) 256–258; tail, 180–194. We have no adequate material to judge the value of this form. A single adult from Cayenne certainly is indistinguishable

Milvago chimachima paludivaga Penard, Proc. New Eng. Zool. Cl., 8, p. 36, Feb. 6, 1923—Erste Rijweg, Paramaribo, Surinam (type in Museum of Comparative Zoology, Cambridge, Mass.); Peters, Bds. World, 1, p. 279, 1931 (range).

Polyborus chimachima (not of Vieillot) Schlegel, Mus. Pays-Bas, Polybori, p. 5, 1862—part, No. 4, Surinam.

Ibycter chimachima Goeldi, Ibis, 1897, p. 161—Amapá.

Milvago chimachima Berlepsch, Nov. Zool., 15, p. 289, 1908—Approuague, French Guiana; Snethlage, Bol. Mus. Goeldi, 8, p. 124, 1914—part, Amapá.

Milvago chimachima chimachima Bangs and Penard, Bull. Mus. Comp. Zool., 62, p. 35, 1918—vicinity of Paramaribo.

Range.—Dutch and French Guiana and extreme northern Brazil (Rocana, Ouassá Swamp, and Amapá, northern Pará).

***Milvago chimachima chimachima** (Vieillot). CHIMACHIMA CARACARA.

Polyborus chimachima Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., 5, p. 259, Dec. 14, 1816—based on "Chimachima" Azara, No. 6, Paraguay; d'Orbigny, Voy. Amér. Mérid., Ois., p. 63, 1835—near the confines of Paraguay (not south of 28° S. Lat.) and Bolivia (Santa Cruz de la Sierra, Chiquitos); Schlegel, Mus. Pays-Bas, Polybori, p. 5, 1862—part, spec. Nos. 1–3, 5, Brazil.

Falco crotophagus Wied, Reise Bras., 1, p. 297 (8vo ed., p. 294), 1820—based on Azara's "Chimachima," near Rio da Frade (between Caravellas and Rio Grande do Belmonte), Bahia.

Falco degener Lichtenstein, Verz. Doubl. Berliner Mus., p. 61, Sept., 1823—Pará and São Paulo, Brazil (type in Berlin Museum); Wied, Beitr. Naturg. Bras., 3, (1), p. 162, 1830—eastern Brazil (Cabo Frio, Coral de Battuba, lagoons of Marica, Sagoarema, Ponta Negro, and Araruama).

Gymnops strigilatus Spix, Av. Spec. Nov. Bras., 1, p. 10, pl. 4a, 1824—"in sylvis ripariis fluminis Xingú," Brazil (descr. of young; type in Munich Museum; cf. Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., 22, No. 3, p. 570, 1906).

Milvago ochrocephalus Spix, Av. Spec. Nov. Bras., 1, p. 12, pl. 5, 1827—São Paulo Province (type in Munich Museum; cf. Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., 22, No. 3, p. 571, 1906); Burmeister, Syst. Uebers. Th. Bras., 2, p. 36, 1855—Brazil (habits).

Polyborus ochocephalus Jardine and Selby, Illust. Orn., Part 1, pl. 2, 1827—Brazil.

Milvago chimachima Pelzeln, Verh. Zool. Bot. Ges. Wien, 12, p. 177, 1862—part, Sapitiba (Piehy), Rio de Janeiro, and Ypanemá, São Paulo (soft parts); idem, Reise Nov., Zool., 1, Vögel, p. 6, 1865—Paratininga, Rio de Janeiro; Sclater and Salvin, Proc. Zool. Soc. Lond., 1866, p. 198—

from the average of British Guiana birds and, as the tone of the dorsal coloring proves to be exceedingly variable, we are afraid the race is a questionable one.

upper Ucayali, Peru; Pelzeln, Orn. Bras., **1**, p. 2, 1867—part, Sapitiba and Ypanemá; Sclater and Salvin, Proc. Zool. Soc. Lond., 1867, p. 569—part, Mexiana Island; Reinhardt, Vidensk. Medd. Naturhist. Foren., 1870, p. 64—Minas Geraes; Sclater and Salvin, Proc. Zool. Soc. Lond., 1873, p. 302—Peru (upper Ucayali, Santa Cruz); Cabanis, Journ. Orn., **22**, p. 230, 1874—Cantagallo, Rio de Janeiro; Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., (2), **1**, No. 6, p. 468, 1876—part, Brazil and Paraguay (monog.); Allen, Bull. Essex Inst., **8**, p. 82, 1876—Anjos, Marajó, Brazil; Sclater and Salvin, Proc. Zool. Soc. Lond., 1879, p. 639—Santa Cruz and Chiquitos, Bolivia; Taczanowski, Orn. Pér., **1**, p. 99, 1884—Peru (upper Ucayali, Santa Cruz); Berlepsch and Ihering, Zeits. Ges. Orn., **2**, p. 172, 1885—Taquara, Rio Grande do Sul; Riker and Chapman, Auk, **8**, p. 161, 1891—Santarém, Brazil; Allen, Bull. Amer. Mus. N. H., **5**, p. 148, 1893—Chapada, Matto Grosso; Salvadori, Boll. Mus. Zool. Torino, **10**, No. 208, p. 19, 1895—Yhú, Paraguay; Holmberg, Seg. Censo Rep. Arg., **1**, p. 504, 1898—from Baradero (Buenos Aires) northward; Salvadori, Boll. Mus. Zool. Torino, **15**, No. 378, p. 14, 1900—Urucúm, Matto Grosso; Goeldi, Ibis, 1903, p. 497—Capim River, Pará; Ihering, Cat. Faun. Braz., **1**, p. 84, 1907—São Paulo (Ypiranga) and Paraná (Curytiba); Lillo, Apunt. Hist. Nat., **1**, p. 22, 1909—Mocoví, Santa Fé; Hartert and Venturi, Nov. Zool., **16**, p. 237, pl. 3, fig. 15 (egg), 1909—Mocoví, Chaco; Lüderwaldt, Zool. Jahrb. (Syst.), **27**, p. 340, 1909—Campo Itatiaya, Brazil; Reiser, Denks. Math.-Naturw. Kl. Akad. Wiss. Wien, **76**, p. 88, 1910—Bahia (Fazenda da Serra, Caesarea das Cabras, and Lagõa do Boqueirão, Rio Grande; Fazenda Imburana, Rio Preto) and Piauhy (Amaraçao); Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 241, 1910—Mocoví, Santa Fé; Grant, Ibis, 1911, p. 334—Puerto San Juan, Paraguay; Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **26**, No. 2, pp. 96, 121, 1912—Rio Capim and Mexiana, Pará; Snethlage, Bol. Mus. Goeldi, **8**, p. 124, 1914—part, Pará, Mexiana, and Marajó (Arary), Brazil; Dabbene, Bol. Soc. Physis, **1**, p. 298, 1914—Mocoví and Ocampo, Santa Fé; Bertoni, Faun. Parag., p. 42, 1914—Puerto Bertoni, Paraguay; Ménégaux, Rev. Franç. d'Orn., **9**, p. 37, 1917—Poconé and Caceres, Matto Grosso; idem, l.c., **10**, p. 289, 1918—Villa Lutetia, Misiones; Swann, Syn. List Accip., p. 9, 1919 (range in part); Tremoleras, El Hornero, **2**, p. 17, 1920—Uruguay; Pereyra, l.c., **3**, p. 174, 1926—San Isidro, Buenos Aires.

Ibycter chimachima Sharpe, Cat. Bds. Brit. Mus., **1**, p. 39, 1874 (in part); Ihering, Ann. Est. Rio Grande do Sul, **16**, p. 138, 1899—Mundo Novo, São Lourenço, and Pedras Brancas, Rio Grande do Sul; idem, Rev. Mus. Paul., **3**, p. 343, 1899—Ypiranga, São Paulo; idem, l.c., **4**, p. 162, 1900—Cantagallo, Rio de Janeiro; Hagmann, Zool. Jahrb. (Syst.), **26**, p. 20, 1907—Mexiana.

Milvago chimachima chimachima Swann, Syn. Accip., p. 15, 1921 (part); idem, Monog. Bds. Prey, **1**, p. 88, 1925 (monog.); Wetmore, Bull. U. S. Nat. Mus., **133**, p. 94, 1926—Chaco (Las Palmas), Formosa (Riacho Pilaga), and Paraguay (west of Puerto Pinasco); Holt, Bull. Amer. Mus. N. H., **57**, p. 283, 1928—Serra do Itatiaya; Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **12**, p. 452, 1929—Maranhão (Barra do Corda; Fazenda Inhuma and Tranqueira, Alto Parnahyba); Naumburg, Bull. Amer. Mus.

N. H., **60**, p. 103, 1930—Paraguay (Puerto Pinasco) and Matto Grosso (Urucúm, Tapirapoan); Laubmann, Wiss. Erg. Deuts. Gran Chaco Exp., Vögel, p. 94, 1930—Formosa (Yuncá Viejo, Tacaaglé, San José) and Bolivia (Buena Vista, Santa Cruz); Peters, Bds. World, **1**, p. 279, 1931 (range); Pinto, Rev. Mus. Paul., **17**, (2), p. 720, 1932—Sant'Anna do Paranahyba and Aquidauana, Matto Grosso; Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 469, 1936 (range in Argentina); Pinto, Rev. Mus. Paul., **22**, p. 87, 1938—Pará (Marajó, Lago Cuipeya), Maranhão (Primeira Cruz), Goyáz (Crixas), São Paulo (Ypiranga, Franca, Ribeirão, Piassaguera, Ilha dos Alcatrazes, Cananéa), and Matto Grosso (Sant'Anna do Paranahyba, Tres Lagõas); Gyldenstolpe, K. Svensk. Vetensk. Akad. Handl., (3), **23**, p. 55, 1945—Bolivia (Reyes and Bresta, El Beni).

Milvago chimachima strigilatus Swann, Monog. Bds. Prey, **1**, p. 89, 1925—eastern Brazil (crit.).

Range.—Northeastern Peru; Brazil, south of the Amazon; eastern Bolivia; Paraguay; Uruguay; and northern Argentina, from Tucumán, through Misiones and the Chaco, to Buenos Aires (Baradero, San Isidro).[1]

Field Museum Collection.—42: Brazil (Labrea, Rio Purús, 2; Canutama, Rio Purús, 2; Lago do Baptista, Amazonas, 4; Piquiatuba, Rio Tapajoz, 1; Caxiricatuba, Rio Tapajoz, 3; Prainha, Boca do Curua, 1; Inhuma, Maranhão, 1; Tranqueira, Maranhão, 2; Barro do Corda, Maranhão, 1; Veadeiros, Goyaz, 1; Rio São Miguel, Goyaz, 1; São Marcello, Bahia, 2; Urucum de Corumba, Matto Grosso, 1; Victoria, São Paulo, 1; Fazenda Morungaba, Paraná, 1); Bolivia, Santa Cruz (Buena Vista, 4; Rio Surutu, 1; San Carlos, 1; Nueva Moka, 1); Paraguay (30–83 km. west of Puerto Casado, 2; Puerto Casado, 2; Horqueta, 5; Serra de Amambay, 3; Nueva Italia, 1); Argentina (Concepción, Tucumán, 1; San Javier, Misiones, 1).

Genus **PHALCOBOENUS** d'Orbigny[2]

[1] Further subdivision appears to be impracticable. Specimens from the estuary of the Amazon (Mexiana, Marajó) are *sometimes* rather paler buff underneath than those from the more southerly parts of the range, but the divergency is too inconstant to justify the recognition of yet another race (*strigilatus*). It should also be kept in mind that the color of the under parts rapidly fades with wear, and particular care must be taken in using for comparative purposes only birds in exactly the same condition of plumage.

Additional material examined.—Paraguay: Concepción, 1; Bernalcué, 1; Villa Rica, 2.—Bolivia: Esperanza, 1; Santa Cruz, 1.—Brazil: Serra da Chapada, Matto Grosso, 2; São Paulo, 4; Rio de Janeiro, 3; Lamarão, Bahia, 1; Alcobaça, Bahia, 1; Bahia, 5; Rio Grande, Bahia, 1; Amaração, Piauhy, 1; Mexiana, 2; Marajó, 4.

[2] About the limits of the genus, cf. Sushkin, Nouv. Mém. Soc. Natur. Moscou, **16**, No. 4, p. 185, 1905, and Peters, Proc. Biol. Soc. Wash., **44**, pp. 24–26, 1931.

Phalcoboenus d'Orbigny, Voy. Amér. Mérid., Ois., livr. 2, pl. 2, 1834—type, by monotypy, *Phalcoboenus montanus* d'Orbigny=*Aquila megaloptera* Meyen.

Senex J. E. Gray, in Jardine and Selby, Ill. Orn., (n.s.), Part 5, text to pl. 24 [p. 2], 1839—type, by monotypy, *Falco australis* "Latham" [=Gmelin].

Aëtotriorchis Kaup, Classif. Säug. Vögel, p. 124, 1844—type, by monotypy, "*Falco novaezealandiae*" (evidently of Temminck, not of Gmelin).

Helotriorchis Reichenbach, Av. Syst. Nat., pl. 98, Aug., 1850—type, by subs. desig. (Sharpe, Cat. Bds. Brit. Mus., **1**, p. 34, 1874), *Falco australis* Gmelin.

*Phalcoboenus australis (Gmelin).[1] FORSTER'S CARACARA.

Falco australis Gmelin, Syst. Nat., **1**, (1), p. 259, 1788—based on "Statenland Eagle" Latham, Gen. Syn. Bds., **1**, (1), p. 40, Staten Island (ex J. R. Forster MS.); Jardine and Selby, Illustr. Orn., (n.s.), Part 5, pl. 24, 1839—Falkland Islands.

Falco novae-zelandiae (not *Falco novae Seelandiae* Gmelin) Temminck, Nouv. Rec. Pl. Col., livr. 33, pls. 192 (adult), 224 (young), April, 1823—Falkland Islands.

Caracara novae-Zelandiae Lesson, Voy. Coquille, Zool., **1**, p. 615, 1830—Falkland Islands.

Circaetus antarcticus Lesson, Traité d'Orn., livr. 1, p. 49, Feb., 1830—based on Latham, Gen. Syn. Bds., **1**, pl. 4, and Temminck, Nouv. Rec. Pl. Col., pls. 192, 224, Falkland Islands (and errore, New Zealand and New Holland).

Milvago leucurus (Forster MS.) Darwin, Zool. Beagle, **3**, Bds., Pt. 3, pp. 13, 15, July, 1838—Falkland Islands and small islands near Tierra del Fuego, Diego Ramirez Rocks, Il Defonso Islands, etc. (new name for *Falco australis* Gmelin); Gould, Proc. Zool. Soc. Lond., **27**, p. 93, 1859—Falkland Islands.

Senex australis J. E. Gray, in Jardine and Selby, Illustr. Orn., (n.s.), Part 5, text to pl. 24 [p. 2], 1839 (diag.; synon.); Salvadori, Ann. Mus. Stor. Nat. Genova, (2), **20**, p. 613, 1900—Penguin Rookery and Port Cook, Staten Island.

Vultur plancus "fem." (not *Falco plancus* Miller) Forster, Descr. Anim., p. 223, 1844—New Year's Island, near Staten Island.

Polyborus australis Cassin, U. S. Expl. Exp., **8**, p. 101, 1858—Orange Harbour (Isla Hoste) and "Tierra del Fuego"; Schlegel, Mus. Pays-Bas, Polybori, p. 3, 1862—Falkland Islands (descr.).

Milvago australis Sclater, Ibis, 1860, p. 25, pl. 1, fig. 1 (egg)[2]—Falkland Islands (egg descr.); idem, Proc. Zool. Soc. Lond., **28**, p. 383, 1860—Falkland

[1] *Phalcoboenus australis* (Gmelin) is a very peculiar species. It is now well established that the sexes in adult plumage are of similar coloration, and that the sooty birds without white terminal tail-bands represent the immature stage. Seventeen specimens from the Falklands (main islands and Sedge Island) and one from St. Martin's Cove, Hermit Island, examined.

[2] The second egg (fig. 2) is that of *Cathartes aura jota* (cf. Abbott, Ibis, 1860, p. 432).

Islands; Abbott, Ibis, 1861, p. 150—East Falkland Island (habits); Pelzeln, Verh. Zool. Bot. Ges. Wien, **12**, p. 136, 1862 (syn.); idem, Ibis, 1873, p. 17 (spec. ex Leverian Museum, fig. by Latham, Gen. Syn. Bds., **1**, pl. 4, as "New Zealand Falcon").

Ibycter australis Sharpe, Cat. Bds. Brit. Mus., **1**, p. 38, 1874—Falkland Islands; Oustalet, Miss. Sci. Cap Horn, **6**, p. B.14, 1891—Falkland Islands (Edwards Bay), Tierra del Fuego (New Year Sound), and Staten Island (Cook Bay); Vallentin, Mem. Proc. Manchester Litt. Phil. Soc., **48**, No. 23, p. 38, 1904—Mount Vernet (near Berkeley Sound), Falkland Islands (nest and egg descr.); Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 240, 1910—"Tierra del Fuego" and Staten Island; idem, Bol. Soc. Physis, **1**, p. 298, 1914 (range); Scott and Sharpe, Rep. Princet. Univ. Exp. Patag., **2**, Orn., p. 579, 1915—Falkland Islands (descr.); Swann, Syn. List Accip., p. 9, 1919 (chars.); idem, Syn. Accip., p. 15, 1921—Falkland Islands (chars.); Wace, El Hornero, **1**, p. 203, 1921—Falkland Islands; Swann, Monog. Bds. Prey, **1**, p. 86, 1925—Falkland Islands (monog.); Bennett, Ibis, 1926, p. 329—outer islands of the Falklands; Reynolds, Ibis, 1932, p. 37—Woodcock Island, Beagle Channel.

Phalcoboenus (*Senex*) *australis* Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., (2), **1**, No. 6, p. 465, 1876—Tierra del Fuego and Falkland Islands (monog.).

Phalcoboenus australis Peters, Proc. Biol. Soc. Wash., **44**, p. 25, 1931 (range); idem, Bds. World, **1**, p. 280, 1931 (range); Reynolds, Ibis, 1935, p. 79—islands of Freycinet, Deceit, and Barnevelt, Cape Horn Archipelago (nesting habits); Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 470, 1936 (bibliog.; range).

Range.—Falkland Islands, Staten Island, and islands off Tierra del Fuego (very rare, perhaps only occasional on the main island) to the Cape Horn Archipelago.

Field Museum Collection.—1: Chile (Cape Horn, Hermit Island, Magallanes, 1).

*Phalcoboenus albogularis[1] albogularis Gould. WHITE-THROATED CARACARA.

Polyborus (*Phalcobaenus*) *albogularis* Gould, Proc. Zool. Soc. Lond., **5**, "1837," p. 9, pub. Oct. 3, 1837—Santa Cruz, Patagonia (type in British Museum examined).

[1] *Phalcoboenus albogularis*, *P. megalopterus*, and *P. carunculatus* form a natural group within the genus, their close affinity being clearly manifested by similarity in the juvenile plumage. Young birds of the two last-named are very much the same in coloration, while the corresponding stage of the Patagonian form merely differs by the darker and browner, less rufescent tone of its plumage. Adults of *albogularis* and *megalopterus*, aside from a slight divergency in the shape of the crown-feathers, are alike in structure, but *P. carunculatus* has a longer, slenderer, more curved bill (noticeable even in young birds) and a bare, wattled throat. While *P. albogularis* is nearly wholly white below, throat and breast are plain black in *P. megalopterus*, streaked with white in *P. carunculatus*. All three have to be treated either as distinct species or as races of a single taxonomic unit, but taking

Milvago albogularis Gould, in Darwin, Zool. Beagle, **3**, Birds, p. 18, pl. 1, July, 1838—Santa Cruz; Burmeister, Anal. Mus. Nac. Buenos Aires, **3**, p. 315, 1888—Caprekaik, Santa Cruz.

Polyborus megalopterus (not *Aquila megaloptera* Meyen) Schlegel, Mus. Pays-Bas, Polybori, p. 4, 1862—Patagonia (descr. of adult).

Ibycter albigularis Sharpe, Cat. Bds. Brit. Mus., **1**, p. 37, 1874—Santa Cruz; Oustalet, Miss. Sci. Cap Horn, **6**, p. B.250, 1891—Rio Gallegos; Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 240, 1910—Patagonia" (Rio Gallegos, Santa Cruz) and Cordillera de Mendoza, Argentina; Swann, Syn. List Accip., p. 9, 1919—Patagonia; Wolffhuegel, in Reichert, Expl. Alta Cord. Mendoza, p. 389, 1929—near Puente del Inca, Mendoza.

Phalcoboenus albogularis Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., (2), **1**, No. 6, p. 464, 1876—Patagonia (descr.); Peters, Proc. Biol. Soc. Wash., **44**, p. 25, 1931 (range; crit.); idem, Bds. World, **1**, p. 280, 1931 (range); Reynolds, El Hornero, **5**, p. 348, 1934—Conejos Island and Tierra del Fuego (Shinolsh, north of Yewin); Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 471, 1936—Neuquén (Junín de los Andes), Rio Negro, Chubut (Rio Deseado), and Santa Cruz; Philippi, Rev. Chil. Hist. Nat., **41**, p. 207, 1937—Estancia Coyhaique, Aysen, Chile (first record).

Ibycter megalopterus Burmeister, Anal. Mus. Nac. Buenos Aires, **3**, p. 315, 1888—Rio Chico de Santa Cruz (70° long.); Scott and Sharpe, Rep. Princet. Univ. Exped. Patag., **2**, Orn., p. 566, 1915—Rio Gallegos and Arroyo Eke (headwaters of Rio Deseado).

Ibycter circumcinctus Scott, Auk, **27**, p. 152, April, 1910—Chubut, Terr. of Chubut (type in Museum of Princeton University); Scott and Sharpe, Rep. Princet. Univ. Exped. Patag., **2**, Orn., p. 578, 1915—Chubut; Swann, Syn. List Accip., p. 9, 1919; idem, Monog. Bds. Prey, **1**, p. 83, 1925 (ex Scott); Peters, Proc. Biol. Soc. Wash., **44**, p. 26, 1931 (crit.).[1]

Ibycter albogularis Scott and Sharpe, Rep. Princet. Univ. Exped. Patag., **2**, Orn., p. 571, 1915—Rio Gallegos, Patagonia; Peters, Bull. Mus. Comp. Zool., **65**, p. 304, 1923—Huanuluan, Rio Negro; Swann, Monog. Bds. Prey, **1**, p. 82, 1925 (monog.); Wetmore, Univ. Calif. Pub. Zool., **24**, p. 420, 1926—Upper Arroyo Bayas, Rio Negro, and Maitén, Rio Chubut (descr. of young).

everything into consideration it appears that the two southern forms are more nearly related one to another than they are to *P. carunculatus*, which, by reason of its naked throat and differently shaped bill, stands rather more apart. Still in view of their remarkably similar juvenile plumage we prefer to unite them in the same specific entity.

[1] *Ibycter circumcinctus* Scott is, as has been correctly pointed out, but an individual mutant of the White-throated Caracara. Two adults from Lago Blanco, Chubut, show no trace of the black pectoral band. On the other hand, this band is well-marked, though largely interrupted in the middle, in an adult male from Nahuel Huapi, and is suggested on the sides of the chest in the type of *P. albogularis*, from Santa Cruz.

The juvenile plumage, which was first described by Alexander Wetmore, is very similar to that of *megalopterus*, but decidedly darker and browner, much less rufescent. With five young *albogularis* and eight *megalopterus* before us, we fail, however, to find any constant difference in the shape of the crown-feathers, while it is plainly discernible in adult birds. The taking of specimens in the brown, juvenile plumage is unquestionably responsible for the records of *megalopterus* at various points in Santa Cruz.

Ibicter albigularis Reed, Av. Prov. Mendoza, **1**, p. 19, 1916—Cordillera of Mendoza.

Ibycter albigularis albigularis Swann, Syn. Accip., p. 14, 1921 (chars.).

Ibycter albigularis circumcinctus Swann, Syn. Accip., p. 14, 1921 (chars.).

Range.—Patagonia from Tierra del Fuego (Conejos Island; Shinolsh, north of Yewin; Viamonte) north through Santa Cruz, Chubut, and Rio Negro to Neuquén; also recorded from Puente del Inca, Mendoza, and Estancia Coyhaique, Aysen, Chile.[1]

Field Museum Collection.—1: Argentina (Arroyo Ceker, Santa Cruz, 1).

***Phalcoboenus albogularis megalopterus** (Meyen). MOUNTAIN CARACARA.

Aquila megaloptera Meyen, Nov. Act. Acad. Caes. Leop.-Carol. Nat. Cur., **16**, Suppl., p. 64, pl. 17, 1834—Chile, in the highest Cordilleras near the edge of the perpetual snow (type in Berlin Museum; descr. of young).

Phalcobaenus montanus d'Orbigny, Voy. Amér. Mérid., Ois., livr. 2, p. 51, pl. 2, figs. 1, 2, 1834—road from Tacna to La Paz, Cordilleras and plateaus of Bolivia (descr. of adult and young; cotypes from Bolivia, in Paris Museum, examined); Fraser, Proc. Zool. Soc. Lond., **11**, p. 108, 1843—valley of the Andes [of Colchagua], Chile; Burmeister, Journ. Orn., **8**, p. 241, 1860—"Sierra de Uspallata" and Tucumán (sight records).

Milvago megalopterus Darwin, Zool. Beagle, **3**, Birds, p. 21, 1839—Despoblado, branch of the Copiapó Valley, Atacama, Chile; Fraser, Proc. Zool. Soc. Lond., **12**, p. 157, 1844—[Colchagua], Chile; Sclater, l.c., 1867, pp. 329, 338—Cordillera of Santiago, Chile (crit.); idem and Salvin, l.c., p. 988—Arequipa, Peru (crit.); iidem, l.c., 1868, p. 569—Arequipa; iidem, l.c., 1869, p. 155—Tinta, Peru; Taczanowski, l.c., 1874, p. 550—Junín and Maraynioc, Peru; Allen, Bull. Mus. Comp. Zool., **3**, p. 355, 1876—Moho, Lake Titicaca; Reed, Anal. Univ. Chile, **49**, p. 559, 1877—Cordillera of Colchagua; Taczanowski, Orn. Pér., **1**, p. 101, 1884—Peru; Sclater, Proc. Zool. Soc. Lond., 1886, p. 399—Sitani, Tarapacá; Allen, Bull. Amer. Mus. N. H., **2**, p. 105, 1889—"Reyes" (errore), Bolivia; Sclater, Proc. Zool. Soc. Lond., 1891, p. 135—Sacaya, Tarapacá, Chile; Reed, Anal. Univ. Chile, **93**, p. 206, 1896—Cordilleras of central Chile; Lane, Ibis, 1897, p. 182—Sacaya and Cancosa, Tarapacá, Chile; Albert, Anal. Univ. Chile, **108**, p. 296, 1901—Chile (monog.).

Polyborus megalopterus Tschudi, Faun. Peru., Orn., p. 78, 1846—Sierra and Puna region of Peru.

Caracara montanus Des Murs, in Gay, Hist. Fís. Pol. Chile, Zool., **1**, p. 210, 1847—Prov. Santiago, Chile (habits); Philippi, Anal. Univ. Chile, **31**, p. 242, 1868—Cordilleras of Santiago and Atacama, Chile.

[1] *Additional material examined.*—Tierra del Fuego: Viamonte, 2.—Santa Cruz: Santa Cruz, 1 (the type).—Chubut: Valle del Lago Blanco, 7.—Neuquén: Nahuel Huapi, 2.

Polyborus montanus Philippi, Reise Wüste Atacama, p. 161, 1860—Atacama Desert, Chile; idem, Ornis, **4**, p. 158, 1888—Antofagasta, Chile.

Milvago crassirostris Pelzeln, Sitzungsber. Akad. Wiss. Wien, Math.-naturw. Kl., **44**, (1), p. 9, 1861—Chile (descr. of adult; type in Vienna Museum examined); idem, Verh. Zool. Bot. Ges. Wien, **12**, p. 136, 1862—Chile; idem, Reise Nov., Zool., **1**, Vögel, p. 3, pl. 1, 1865—Chile (crit.; descr. of young).

Phalcoboenus megalopterus Burmeister, Reise La Plata St., **2**, p. 434, 1861—"near Uspallata" and Tucumán (seen only); Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., (2), **1**, No. 6, p. 462, 1876 (monog.); Berlepsch and Stolzmann, Proc. Zool. Soc. Lond., 1902, (2), p. 42—Baños, San Blas, Ingapirca, and Andores, Junín, Peru; Hellmayr, Nov. Zool., **28**, p. 175, 1921 (note on d'Orbigny's specimen); Peters, Proc. Biol. Soc. Wash., **44**, p. 26, 1931 (range; crit.); Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **19**, p. 288, 1932—Cordilleras of Chile from Tacna to Colchagua; Housse, Rev. Chil. Hist. Nat., **41**, p. 131, 1937—part, except Ecuador (life hist.).

Ibycter megalopterus Sharpe, Cat. Bds. Brit. Mus., **1**, p. 36, 1874—Chile, Bolivia, and Peru (Arequipa, Tinta); Lillo, Anal. Mus. Nac. Buenos Aires, **8**, p. 202, 1902—Tucumán; Lönnberg, Ibis, 1903, p. 447—Moreno, Jujuy; Baer, Ornis, **12**, p. 229, 1904—Lara, Tucumán; Bruch, Rev. Mus. La Plata, **11**, p. 251, 1904—Orán, Salta; Lillo, Rev. Letr. Cienc. Soc., **3**, No. 13, p. 61, 1905—Cerro Muñoz and Taff, Tucumán; Ménégaux, Bull. Soc. Philom. Paris, (10), **1**, p. 206, 1909—Bolivia (La Paz, Yura, Coniri); Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 240, 1910 (range in Argentina); idem, Bol. Soc. Physis, **1**, p. 298, 1914 (range in Argentina); Bangs and Noble, Auk, **35**, p. 443, 1918—Lake Warinja, northwestern Peru; Swann, Syn. List Accip., p. 8, 1919 (range); idem, Syn. Accip., p. 14, 1921 (range); Chapman, Bull. U. S. Nat. Mus., **117**, p. 57, 1921—above Torontoy and Lucma, Urubamba, Peru; Swann, Monog. Bds. Prey, **1**, p. 80, 1925 (monog.).

Phalcoboenus negalopterus (sic) Barros, Rev. Chil. Hist. Nat., **25**, p. 175, 1921—Cordillera of Aconcagua, Chile.

Ibycter megalopterus megalopterus Zimmer, Field Mus. Nat. Hist., Zool. Ser., **17**, p. 248, 1930—Panao, Huánuco, Peru.

Phalcoboenus megalopterus megalopterus Peters, Bds. World, **1**, p. 280, 1931 (range); Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 473, 1936—La Pana, Salta (range in Argentina); Bond and de Schauensee, Proc. Acad. Nat. Sci. Phila., **95**, p. 179, 1943—Oplaca, Kari-Kari Mts., Potosi, Viloca, Bolivia.

Range.—Puna zone of Peru, Bolivia, northern Chile (from Tacna to Colchagua), and northwestern Argentina (prov. of Jujuy, Salta, and Tucumán).[1]

[1] Burmeister's sight record from the Sierra de Uspallata, Mendoza, has never been confirmed.

On studying a good series from various parts of the range we are unable to find any racial variation either in coloration or in shape of bill.

Additional material examined.—Peru: Corcuges Páramo, Libertad, 1; Galera, Junín, 1; Junín, 2; Lauramarca, Cuzco, 1; Tinta, 3; Arequipa, 1; unspecified, 2.—

Field Museum Collection.—32: Peru (Macate, Ancachs, 1; Panao Mountains, Huánuco, 2; Junín, 4; Cailloma, Arequipa, 1; Chucuito, Puno, 1); Bolivia (Esperanza, Pacajes, La Paz, 2; Vacas, Cochabamba, 3; Colomi, Cochabamba, 2; Cerro Juno, Cochabamba, 3; Cerro San Benito, Cochabamba, 3; Colomi, Cochabamba, 9); Argentina (Aconquija, Tucumán, 1).

*Phalcoboenus albogularis carunculatus Des Murs.

CARUNCULATED CARACARA.

Phalcoboenus carunculatus Des Murs, Rev. Mag. Zool., (2), **5**, p. 154, 1853—"Colombia" (type in coll. of T. Wilson, now in the Academy of Natural Sciences of Philadelphia;[1] cf. Des Murs, Ibis, 1861, p. 21); Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., (2), **1**, No. 6, p. 464, 1876 (monog.); Salvadori and Festa, Boll. Mus. Zool. Torino, **15**, No. 368, p. 27, 1900—Paredones (Páramos del Azuay), La Concepción (Chota), Altipiani de Tarquí, Cañar, and El Troje (Huaca), Ecuador (plumages); Ménégaux, Miss. Serv. Géog. Armée Mes. Arc Mérid. Équat., **9**, p. B.11, 1911—Mozo Pichincha and crater of Pichincha, Ecuador; Peters, Proc. Biol. Soc. Wash., **44**, p. 26, 1931 (range).

Milvago megalopterus (not *Aquila megaloptera* Meyen) Sclater, Proc. Zool. Soc. Lond., **26**, p. 555, 1858—above Punín (Riobamba), Ecuador.

Milvago carunculatus Sclater, Proc. Zool. Soc. Lond., **28**, p. 81, 1860—Páramo on the road to Guagua, Pichincha, Ecuador; Orton, Amer. Nat., **5**, p. 94, 1871—Quito Valley; Goodfellow, Ibis, 1902, p. 222—Pichincha and Vallevicioso, Ecuador.

Polyborus (*Milvago, Phalcoboenus*) *carunculatus* Sclater, Ibis, 1861, p. 19, pl. 1 (adult)—Andes of Ecuador (descr.).

Ibycter carunculatus Sharpe, Cat. Bds. Brit. Mus., **1**, p. 38, 1874—Ecuador; Rhoads, Auk, **29**, p. 148, 1912—Páramo of Pichincha; Swann, Syn. List Accip., p. 9, 1919; idem, Syn. Accip., p. 15, 1921; Lönnberg and Rendahl, Ark. Zool., **14**, No. 25, p. 29, 1922—Chaupicruz, western side of Antisana, Corazón, Tablón, near Machache, Nono, and above Lloa, Ecuador (plumages); Swann, Monog. Bds. Prey, **1**, p. 84, 1925 (monog.); Chapman, Bull. Amer. Mus. N. H., **55**, p. 220, 1926—Antisana, Chimborazo, Taraguacocha, and Cerro Guaminí (near Papallacta), Ecuador.

Phalcoboenus megalopterus carunculatus Peters, Bds. World, **1**, p. 280, 1931 (range); Dugand, Caldasia, **1**, No. 3, p. 58, 1941—Cumbal, Narino, Colombia; idem, Rev. Acad. Colomb. Cienc., Bogotá, **4**, p. 397, pl. 4, fig. 24, 1941—Colombia.

Bolivia: Umapusa, 2; Sicasica, 1; unspecified, 2.—Chile: Sacaya, Tarapacá, 2; Cancosa, Tarapacá, 1; Sitani, Tarapacá, 1; Abricoya, Tarapacá, 1; Cordillera of Santiago, 2; unspecified, 14.—Argentina: Lara, Tucumán, 1.

[1] Though not listed by Stone (Proc. Acad. Nat. Sci. Phila., 1899, pp. 5–62), the type is without much doubt the specimen mentioned by Ridgway (Bull. U. S. Geol. Geog. Surv. Terr., (2), **1**, No. 6, p. 464, 1876) as being in the Academy of Sciences of Philadelphia.

Range.—Páramo zone of southwestern Colombia (Narino) and Ecuador.[1]

Field Museum Collection.—21: Colombia (Cumbál, Narino, 6); Ecuador (Cordillera Antisana, Pichincha, 7; Llanganate, Tunguragua, 6; Cerro Chimborazo, 2).

Genus CARACARA Merrem[2]

Caracara Merrem, in Ersch and Gruber, Allg. Encycl. Wiss. und Künste, **15**, p. 159, 1826—type, by present designation, *Falco plancus* Miller.[3]

*Caracara plancus plancus (Miller). SOUTHERN CARACARA.

Falco plancus Miller, Var. Subj. Nat. Hist., Part 3, pl. 17, 1777—Tierra del Fuego.

Falco tharus Molina, Sagg. Stor. Nat. Chile, pp. 264, 343, 1782—Chile.

Polyborus vulgaris Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **5**, p. 257, Dec. 14, 1816—based chiefly on "Caracara" Azara, No. 4, Paraguay;[4] idem and Oudart, Gal. Ois., **1**, (1), p. 23, pl. 7, 1820—South America; Spix, Av. Spec. Nov. Bras., **1**, p. 3, 1824—Minas Geraes and Piauhy; d'Orbigny, Voy. Amér. Mérid., Ois., p. 55, 1835—part, Banda Oriental, La Plata, Buenos Aires, marshes on the limits of Paraguay, and arid coasts of

[1] The occurrence of this Caracara in Colombia, whence the type is claimed to have originated, has now been confirmed. The type is stated to possess a narrow white superciliary streak, a feature which is not even suggested in any of the numerous Ecuadorian or Colombian adults we have examined.

Additional material examined.—Ecuador: Corazón, 1; Pichincha, 2; Sical, 2; Cayambé, 1; unspecified, 4.

[2] It is very unfortunate that *Polyborus* Vieillot (Anal. Nouv. Orn. Élém., p. 22, April, 1816—type, by monotypy, "Caracara" Buffon), long applied to the Caracara Falcons, cannot stand for that group. Buffon's "Caracara" (Hist. Nat. Ois., Impr. Ros. ed., **1**, p. 175) is exclusively based on Marcgrave's bird (in Hist. Nat. Bras., p. 211), which Schneider (Journ. Orn., **86**, p. 93, 1938), from a study of the original drawing, has shown to be *Circus buffoni*. Although the generic features of *Polyborus* were undoubtedly taken from *Falco plancus* (or rather its northern race), as is shown by Vieillot's subsequent detailed account (in Nouv. Dict. Hist. Nat., nouv. éd., **5**, p. 256, Dec. 14, 1816), the author defeated his own intention by citing "Caracara" as the only species, which automatically becomes the genotype, making *Polyborus* a synonym of *Circus*. The present case is an exact parallel to the genus *Cassidix* Lesson (cf. Field Mus. Nat. Hist., Zool. Ser., **13**, (10), p. 88, 1937).

[3] Merrem, in separating the genus from *Cathartes* on certain structural characters, includes in it four species: (1) *C. accipitrina* (*Falco madagascariensis*) (=*Polyboroides radiatus*); (2) *C. aquilina* (=*Daptrius americanus*); (3) *C. crotophaga* (=*Milvago chimachima*); (4) *C. plancus*, with which *Falco cheriway* is considered to be synonymous. We herewith designate *Falco plancus* Miller as genotype.

[4] Although Vieillot states that he has seen a live bird in the Jardin des Plantes at Paris, his description is almost a verbatim translation of Azara's account of the bird's character and habits. In addition to Paraguay, where his observations were mostly made, Rio de la Plata and Montevideo are incidentally mentioned by Azara.

Patagonia and Chile; Burmeister, Syst. Uebers. Th. Bras., **2**, p. 40, 1855—Lagõa Santa, Minas Geraes (habits); idem, Reise La Plata St., **2**, p. 434, 1861—Argentina.

Polyborus caracara Spix, Av. Spec. Nov. Bras., **1**, pl. 1a, 1824.

Polyborus braziliensis (not *Falco brasiliensis* Gmelin) Swainson, Zool. Ill., (n.s.), **1**, pl. 2, 1829 (fig. of adult).

Polyborus brasiliensis Darwin, Zool. Beagle, **3**, Birds, p. 9, 1839—La Plata and Patagonia as far as Cape Horn and Tierra del Fuego (habits); Pelzeln, Verh. Zool. Bot. Ges. Wien, **12**, p. 178, 1862—part, Rio de Janeiro (Sapitiba) and São Paulo (Ypanemá, Itararé); Schlegel, Mus. Pays-Bas, No. 9, Polybori, p. 2, 1862—part, spec. Nos. 1, 2, 5, 6, Brazil; Sclater and Salvin, Proc. Zool. Soc. Lond., 1867, p. 589—Mexiana Island, Brazil (spec. examined).

Polyborus tharus Sharpe, Cat. Bds. Brit. Mus., **1**, p. 31, 1874 (monog.); Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., (2), **1**, No. 6, p. 455, 1876 (monog.); Oustalet, Miss. Sci. Cap Horn, **6**, p. B. 9, 1891—Santa Cruz (Isla Pavon) and Tierra del Fuego (Orange Bay, Pointe Sauvinet, New Year Sound, etc.); Allen, Bull. Amer. Mus. N. H., **5**, p. 148, 1893—Chapada, Matto Grosso; Aplin, Ibis, 1894, p. 196—Arroyo Grande, Uruguay; Koslowsky, Rev. Mus. La Plata, **6**, pp. 285, 291, 1895—La Rioja (Chilecito) and Catamarca; Salvadori, Ann. Mus. Civ. Stor. Nat. Genova, (2), **20**, p. 613, 1900—Staten Island (Penguin Rookery) and Straits of Magellan (Rio Pescado, Punta Arenas, Possession Bay); Lillo, Anal. Mus. Nac. Buenos Aires, **8**, p. 160, 1902—Tucumán; Bruch, Rev. Mus. La Plata, **11**, p. 251, 1904—Orán, Salta; Crawshay, Bds. Tierra del Fuego, p. 1, 1907—Sara Settlement and Cheena Creek (habits); Hagmann, Zool. Jahrb. (Syst.), **26**, p. 19, 1907—Mexiana, Brazil; Ihering, Cat. Faun. Braz., **1**, p. 82, 1907—São Sebastião and Ypiranga, São Paulo; Hartert and Venturi, Nov. Zool., **16**, p. 237, 1909—Buenos Aires (Barracas al Sud) and Tucumán (Los Vasques); Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 240, 1910 (range in Argentina); Reiser, Denks. Math.-Naturw. Kl. Akad. Wiss. Wien, **76**, p. 88, 1910—Bahia (Solidade, near Carnahyba; Fazenda da Serra, Rio Grande) and Piauhy (Olho d'Agua, near Parnaguá); Snethlage, Bol. Mus. Goeldi, **8**, p. 123, 1914—Marajó (Rio Arary, São Natal, Pacoval).

Polyborus plancus Scott and Sharpe, Rep. Princet. Univ. Exped. Patag., **2**, Orn., p. 555, 1915—Rio Gallegos, Patagonia (descr.; range); Brooks, Bull. Mus. Comp. Zool., **61**, p. 157, 1917—Falkland Islands; Swann, Syn. List Accip., p. 7, 1919 (chars.; range); idem, Syn. Accip., p. 12, 1921 (range).

Polyborus plancus plancus Swann, Monog. Bds. Prey, **1**, p. 67, 1925—Paraguay and Chile to Straits of Magellan (monog.); Wetmore, Bull. U. S. Nat. Mus., **133**, p. 95, 1926—Argentina and Uruguay (crit.); Laubmann, Wiss. Erg. Deuts. Gran Chaco Exp., Vögel, p. 92, 1930—Lapango, San José, and Tacaaglé, Formosa (crit.; meas.); Peters, Bds. World, **1**, p. 280, 1931 (range); Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **19**, p. 290, 1932—Copiapó to Straits of Magellan (full Chilean bibliog.); Bullock, Rev. Chil. Hist. Nat., **39**, p. 241, 1935—Isla la Mocha, Chile; Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 474, 1936 (range in Argentina; full bibliog.); Philippi, El Hornero, **6**, p. 232, 1936—Chacalluta, Tacna, Chile.

Polyborus plancus brasiliensis Swann, Monog. Bds. Prey, **1**, p. 69, 1925—northern Paraguay to the Amazon (monog.); Wetmore, Bull. U. S. Nat. Mus., **133**, p. 97, 1926—Paraguay (west of Puerto Pinasco) (meas.); Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **12**, p. 451, 1929—Ibiapaba, Piauhy; Naumburg, Bull. Amer. Mus. N. H., **60**, p. 102, 1930—Matto Grosso and Paraguay (Puerto Pinasco, Fort Wheeler); Peters, Bds. World, **1**, p. 280, 1931—Amazon to Paraguay and Brazil; Pinto, Rev. Mus. Paul., **17**, (2), p. 719, 1932—Aquidauana, Matto Grosso; Brodkorb, Occ. Pap., Mus. Zool. Univ. Mich., **349**, p. 2, 1937—Caviana Island, Brazil; Pinto, Rev. Mus. Paul., **22**, p. 88, 1938—São Paulo (Ypiranga, São Sebastião, Itatiba, Serra Negra); Gyldenstolpe, K. Svensk. Vetensk. Akad. Handl., (3), **23**, p. 55, 1945—Bresta, El Beni, Bolivia (disc.).

Range.—South America, from northern Chile (Tacna), the Rio Purus (Canutama), and the islands in the estuary of the Amazon (Marajó, Mexiana, Caviana) south through Brazil, eastern Bolivia, Paraguay and Argentina to Tierra del Fuego; Falkland Islands.[1]

Field Museum Collection.—21: Brazil (Canutama, Rio Purús, 2; Miritiba, Maranhão, 1; Ibiapaba, Piauhy, 1; Rio São Miguel, Goyaz, 1; São Marcello, Rio Preto, Bahia, 1; Vaccaria, Matto Grosso, 2); Bolivia (Aiquile, Cochabamba, 1); Paraguay (265 km. west of Puerto Casado, 1); Argentina (Concepción, Tucumán, 5); Chile (Papudo, Aconcagua, 2; Sierra Nahuelbuta, Malleco, 1; Melinka, Ascension Island, 1; Rio Ciaike, Magallanes, 2).

*Caracara plancus cheriway (Jacquin).[2] NORTHERN CARACARA.

Falco cheriway Jacquin, Beytr. Gesch. Vögel, p. 17, pl. 4, 1784—Aruba (described from a live bird in the Vienna Zoo).

Pandion caracara (not *Polyborus caracara* Spix) Gray, in Griffith, Cuvier's Animal Kingdom, **6**, p. 235, 1829—Curaçao.

[1] After examining and measuring a considerable number of specimens we find it very hard to draw a line between the two races into which the Southern Caracara has been split by Swann, Wetmore, and others, although we do not deny that birds from Brazil are generally smaller. The subjoined measurements of the wings in adult birds may serve to illustrate the difficulty of maintaining the distinction between *C. p. plancus* and *C. p. caracara* (Spix) of Brazil: Mexiana Island, 410; Itaparica, Bahia, 390 (female); Bahia, 408; Cruzeiro, São Paulo, 400 (female); Sapucay, Paraguay, 395 (male); Villa Rica, Paraguay, 445 (female); Concepción, Paraguay, 395 (male); Rosario, Salta, 410 (male); Lapango, Formosa, 420 (female), 400 (male); Buenos Aires, 420, 435 (female); Espartillar, Buenos Aires, 440 (male!); Uruguay, 440 (male); Corral, Valdivia, Chile, 420 (female); Tom Bay, Magellan Straits, 450 (female); Hermit Island, 455.

[2] *Caracara plancus cheriway* (Jacquin) appears to us nothing else but a well-marked race of the Southern Caracara. Its chief characters, viz., blacker coloration and reduction of white barring both on rump and chest, are merely differences of degree, while the existing gap in measurements between *cheriway* and the especially large individuals of *plancus* from the Straits of Magellan is completely bridged by specimens from intermediate localities. Moreover, two adults from Obidos, by more heavily barred lateral upper tail coverts, mark a decided step

Polyborus vulgaris (not of Vieillot) Tschudi, Unters. Faun. Peru., Orn., p. 77, 1846—coast of Peru.

Polyborus caracara Schomburgk, Reisen Brit. Guiana, **1**, pp. 386, 394, 1847—savanna near Pirara.

Polyborus cheriway Cabanis, in Schomburgk, Reisen Brit. Guiana, **3**, "1848," p. 741, 1849—British Guiana; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 33, 1874—British Guiana, Ecuador (Puná Island), and Venezuela (Valencia); Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., (2), **1**, No. 6, p. 457, 1876—part, Ecuador (Puná Island, Guayaquil), Venezuela (Valencia), British Guiana, and Brazil (monog.); Brown, Canoe and Camp Life Brit. Guiana, p. 167, 1876—near Curawashinang; Sclater and Salvin, Proc. Zool. Soc. Lond., 1879, p. 542—Rio Negro, Antioquia, Colombia (nest and eggs descr.); Salvin and Godman, Ibis, 1880, p. 177—Valencia, Santa Marta, Colombia; Salvin, l.c., 1886, p. 78—British Guiana (ex Schomburgk); Hartert, Nov. Zool., **5**, p. 501, 1890, Cayambé, Ecuador; Riker and Chapman, Auk, **8**, p. 161, 1891—Santarém, Brazil (crit.); Peters, Journ. Orn., **33**, p. 110, 1892—Curaçao; Hartert, Ibis, 1893, pp. 303, 321, 332—Aruba, Curaçao, Bonaire, and Venezuela (Paraguana Peninsula); Robinson, Flying Trip to Tropics, p. 155, 1895—Magdalena River, Colombia; idem, Proc. U. S. Nat. Mus., **18**, p. 662, 1896—Porlamar, Margarita Island, Venezuela; Allen, Bull. Amer. Mus. N. H., **13**, p. 131, 1900—Bonda, Colombia; Salvadori and Festa, Boll. Mus. Zool. Torino, **15**, No. 368, p. 27, 1900—El Troje (Huaca), Ibarra, Vinces, and Puntilla de Santa Elena, Ecuador; Berlepsch and Hartert, Nov. Zool., **9**, p. 111, 1902—Caicara and Altagracia, Orinoco, Venezuela; Hartert, l.c., p. 303, 1902—Aruba, Curaçao, and Bonaire; Goodfellow, Ibis, 1902, p. 223—Corazón, Ecuador; Thayer and Bangs, Bull. Mus. Comp. Zool., **46**, p. 144, 1905—Pacheca Island, Pearl Archipelago, Panama; Ihering, Cat. Faun. Braz., **1**, p. 83, 1907 (range in part); Lowe, Ibis, 1909, p. 322—Cariaco Peninsula, Venezuela; Cory, Field Mus. Nat. Hist., Orn., **1**, pp. 198, 205, 210, 242, 253, 1909—Aruba, Curaçao, Bonaire, and Margarita Islands; Chubb, Bds. Brit. Guiana, **1**, p. 213, 1916—Upper Takutu Mountains, Abary River, Quitero River, and Georgetown; Cherrie, Sci. Bull., Mus. Brookl. Inst., **2**, p. 340, 1916—Altagracia and Caicara, Orinoco Valley (habits); Chapman, Bull. Amer. Mus. N. H., **36**, p. 238, 1917—La Manuelita and Bogotá Savanna, Colombia; Rendahl, Ark. Zool., **13**, No. 4, p. 19, 1920—Pacheca Island, Pearl Archipelago; Lönnberg and Rendahl, l.c., **14**, No. 25, p. 29, 1922—Carapungo, Ecuador; Young, Ibis, 1929, p. 4—Blairmont, British Guiana; Dugand, Rev. Acad. Colomb. Cienc., Bogotá, **4**, p. 397, pl. 4, fig. 21, 1941—Colombia.

Polyborus tharus (not *Falco tharus* Molina) Sclater, Proc. Zool. Soc. Lond., **28**, p. 288, 1860—Babahoyo, Ecuador; idem and Salvin, l.c., 1869, p. 252—

in the direction of *plancus*. While we have seen it only from north of the Amazon, *cheriway* has also been recorded from Santarem and Rhomes, south of the river. Specimens from Marajó and Mexiana, however, are small-sized *C. p. plancus* of typical coloration.

Additional material examined.—Colombia: Atuncela, western Andes, 1; Valencia, Santa Marta, 1.—Ecuador: Balzar, 1; Puná Island, 1.—Peru: Pacasmayo, 1.—Venezuela: Maruria, Lake Valencia, 1; Caracas, 1; Laguna del Obispo, 1.—British Guiana: Abary River, 3; Annai, 1; Quonga, 1.—Brazil: Forte do Rio Branco, 1; Obidos, 2.

Maruria, Lake Valencia, Venezuela; Allen, Bull. Essex Inst., **8**, p. 82, 1876—Rhomes (60 miles from Santarém), Brazil; Taczanowski, Proc. Zool. Soc. Lond., 1877, p. 745—Tumbez, Peru; idem, Orn. Pér., **1**, p. 92, 1884—coast of Peru.

Polyborus brasiliensis (not *Falco brasiliensis* Gmelin) Pelzeln, Verh. Zool. Bot. Gesells. Wien, **12**, p. 178, 1862—part, Forte do Rio Branco, Brazil; Schlegel, Mus. Pays-Bas, Polybori, p. 2, 1862—part, spec. 2, Surinam; Taylor, Ibis, 1864, p. 79—shores of the Orinoco, Venezuela; Pelzeln, Orn. Bras., **1**, p. 2, 1867—part, Forte do Rio Branco.

Polyborus auduboni (not of Cassin) Berlepsch, Ibis, 1884, p. 437—Angostura, Orinoco, Venezuela; idem, Journ. Orn., **32**, p. 317, 1884—Bucaramanga, Colombia.

Polyborus cheriway cheriway Bangs and Noble, Auk, **35**, p. 443, 1918—Perico, Marañón River, Peru; Swann, Syn. Accip., p. 12, 1921—part, northern South America; Todd and Carriker, Ann. Carnegie Mus., **14**, p. 163, 1922—Fundación, Bonda, and Punta Caiman, Santa Marta, Colombia; Swann, Monog. Bds. Prey, **1**, p. 70, col. pl., 1925 (monog.); Chapman, Bull. Amer. Mus. N. H., **55**, p. 219, 1926—Daule, Puná Island, Zaruma and Alamor, Ecuador; Peters, Bds. World, **1**, p. 280, 1931 (range); Darlington, Bull. Mus. Comp. Zool., **71**, p. 369, 1931—Rio Frio, Magdalena, Colombia; Belcher and Smooker, Ibis, 1934, p. 593—Trinidad (straggler); Griscom, Bull. Mus. Comp. Zool., **79**, p. 302, 1935—Pearl Islands and Darien.

Range.—Eastern Panama (Darien and Pearl Islands) and northern South America, south on the west to the coast of northern Peru and the Upper Marañon Valley, and on the east to the Amazon (Obidos, Santarem); islands of Aruba, Curacao, Bonaire and Margarita; occasionally on the island of Trinidad.

Field Museum Collection.—35: Colombia (El Palmer de Avorela, Atlantico, 1; Timba, Valle de Cauca, 1; El Tambo, Cauca, 3; Rio Patia, Cauca, 1); Ecuador (Valles de Ibarra, Imbabura, 1); Venezuela (Maracaibo, Zulia, 1; Puerto Cabello, Carabobo, 1; Maracay, Aragua, 3; Lake Valencia, Aragua, 1; Margarita Island, 1); Dutch West Indies (Bonaire, 1; Aruba, 1); British Guiana (Buxton, 5); Brazil (Bõa Vista, Rio Branco, Amazonas, 2; Itacoatiara, Rio Amazonas, 4; Igarape Aniba, Rio Amazonas, 4; Boca Ituqui, Pará, 2; Obidos, Pará, 2).

***Caracara plancus ammophilus** (van Rossem).[1] SONORAN CARACARA.

Polyborus cheriway ammophilus van Rossem, Ann. Mag. Nat. Hist., (11), **4**, p. 441, Oct., 1939—Tesia, Sonora, Mexico (type in the Dickey Collection,

[1] *Caracara plancus ammophilus* (van Rossem) differs from *C. p. audubonii* by its smaller size, particularly in the bill and feet. The more prominently barred tail, given as a distinctive character by the describer, does not hold good in the specimens in Field Museum.

University of California, Los Angeles); idem, Occ. Pap., Mus. Zool. Louisiana State Univ., **21**, p. 62, 1945—Sonora (distr.).

Polyborus cheriway (not *Falco cheriway* Jacquin) Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 125, 1901—part, Lower California and Sonora to Nayarit, Mexico.

Polyborus cheriway audubonii(*i*) Grinnell, Univ. Calif. Pub. Zool., **32**, p. 113, 1929—Lower California; Peters, Bds. World, **1**, p. 281, 1931—part, Lower California, and Sonora to Nayarit, Mexico.

Range.—Southern Arizona, Lower California, and Sonora south to Nayarit, Mexico.

Field Museum Collection.—8: Arizona (Sahuarita, Pima County, 1); Mexico (San Ignacio, Lower California, 1; Camoa, Sonora, 6).

***Caracara plancus audubonii** (Cassin).[1] AUDUBON'S CARACARA.

Polyborus Audubonii Cassin, Proc. Acad. Nat. Sci. Phila., 1865, No. 1, Jan.–March, p. 2, pub. Aug. 7, 1865—Florida (type said to be in U. S. National Museum; cf. Stone, Proc. Acad. Nat. Sci. Phila., 1899, p. 29).[2]

Polyborus cheriway (not *Falco cheriway* Jacquin) Sharpe, Cat. Bds. Brit. Mus., **1**, p. 33, 1874—part, North and Central America; Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., (2), **1**, No. 6, p. 457, 1876—part, middle America, Louisiana, Texas, and Cuba; Boucard, Proc. Zool. Soc. Lond., 1883, p. 457—Yucatan; Bendire, Life Hist. N. Amer. Bds., **1**, p. 315, 1892 (habits); Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 125, 1901—part, eastern Mexico to Costa Rica; Bangs, Proc. New Eng. Zool. Cl., **3**, p. 19, 1902—Bogaba, Chiriquí; Bangs and Zappey, Amer. Natur., **39**, p. 191, 1905—Santa Fé, Isle of Pines; Dearborn, Field Mus. Nat. Hist., Orn. Ser., **1**, p. 84, 1907—El Rancho, Gualan, and San José, Guatemala; Carriker, Ann. Carnegie Mus., **6**, p. 450, 1910—Guanacaste, Costa Rica; Todd, l.c., **10**, p. 198, 1916—Nueva Gerona, Isle of Pines; Rendahl, Ark. Zool., **12**, No. 8, p. 10, 1919—Panama Viejo, Panama, and Rio Menco, Nicaragua.

Polyborus tharus auduboni Sennett, Bull. U. S. Geol. Geog. Surv. Terr., **4**, No. 1, p. 44, 1878—Corpus Christi and Padre Island, Texas (nest and eggs); idem, l.c., **5**, No. 3, p. 421, 1879—Lomita, Texas (habits; eggs).

[1] *Caracara plancus audubonii* (Cassin) is rather an unsatisfactory race, the supposed color differences being completely obliterated through individual variation. However, the generally smaller dimensions of the northern birds may be deemed sufficiently constant to warrant its recognition.

[2] Though Cassin states that the type was presented by J. J. Audubon to the Academy of Natural Sciences at Philadelphia, Stone claims it to be in the U. S. National Museum; but Friedmann states that it cannot be found there. According to James Bond, however (in litt.), there is in the Philadelphia Academy a specimen of Audubon's Caracara with the following data on the label and in the catalogue "A.N.S.P. 73; male; *Polyborus cheriway;* Florida; J. J. Audubon." This specimen had formerly been mounted, was donated by Audubon, and is apparently the only Caracara presented by him to the Academy. Cassin also states in the original description that the specimens in the Smithsonian Institution were from Texas and Mexico.

Polyborus cheriway auduboni(i) Bangs and Noble, Auk, **35**, p. 443, 1918 (crit.); Barbour, Mem. Nutt. Orn. Cl., **6**, p. 44, 1923—Cuba and Isle of Pines; Swann, Monog. Bds. Prey, **1**, p. 71, 1925 (monog.); Peters, Bds. World, **1**, p. 281, 1931—part, except northwestern Mexico; Huber, Proc. Acad. Nat. Sci. Phila., **84**, p. 211, 1932—Prinzapolka, Nicaragua; Griscom, Bull. Mus. Comp. Zool., **78**, p. 302, 1935—western Panama; Dickey and van Rossem, Field Mus. Nat. Hist., Zool. Ser., **23**, p. 135, 1938—El Salvador (habits; plumages; food); Oberholser, Bird Life Louisiana, p. 182, 1938—southern Louisiana (casual visitor); Bent, Bull. U. S. Nat. Mus., **170**, p. 127, 1938 (habits).

Polyborus cheriway cheriway Griscom, Bull. Amer. Mus. N. H., **64**, p. 149, 1932—Finca El Cipres, Guatemala.

Range.—Arizona (except extreme south), Texas, and Florida (casual in Louisiana) south through Mexico (except northwest part) and Central America to western Panama (Bogaba, Chiriquí; Panama Viejo); also Cuba and the Isle of Pines, Greater Antilles.

Field Museum Collection.—39: Texas (Cameron County, 10; Brownsville, 2); Florida (Fort Pierce, 1; Lake Okeechobee, 1; Fort Thompson, 1; Kissimmee River, 3; Fort Denaud, 1; Osceola County, 4; Orlando, 1); Cuba (eastern part, 1); Mexico (Apatzingan, Michoacan, 1; Iguala, Guerrero, 1; Tampico, Tamaulipas, 3; Yucatan, 1); El Salvador (Sitio del Nino, La Libertad, 2; Hacienda Zapotitan, La Libertad, 1); Guatemala (San José, 1; Tiquisate, Escuintla, 1); Honduras (Zambrano, Comayagua, 2); Costa Rica (San José, 1).

Caracara plancus pallidus (Nelson).[1] TRES MARIAS CARACARA.

Polyborus cheriway pallidus Nelson, Proc. Biol. Soc. Wash., **12**, p. 8, Jan. 27, 1898—Maria Madre Island, Tres Marias Islands, off Mexico (type in U. S. National Museum); idem, N. Amer. Fauna, **14**, p. 38, 1899—Maria Madre; Swann, Monog. Bds. Prey, **1**, p. 72, 1925 (monog.); McLellan, Proc. Calif. Acad. Sci., (4), **15**, p. 298, 1926—Maria Madre; idem, l.c., (4), **16**, p. 19, 1927—Maria Madre; Peters, Bds. World, **1**, p. 281, 1931 (range).

Polyborus pallidus Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 127, 1901—Tres Marias Islands.

Range.—Tres Marias Islands (Maria Madre), off western Mexico.

Caracara lutosus (Ridgway). GUADALUPE CARACARA.

Polyborus lutosus Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., (2), **1**, No. 6, p. 459, Feb. 8, 1876—Guadalupe Island, Lower California (type in U. S.

[1] *Caracara plancus pallidus* (Nelson): General pattern as in *C. p. cheriway*, but much paler throughout with the dusky crossbars on the tail less pronounced, and the pale and dusky markings on the upper back more in the form of regular bars; size slightly smaller. Wing, 370, (female) 386; tail, 194, (female) 205; tarsus, 86½, (female) 88.

National Museum); idem, l.c., **2**, No. 2, p. 192, Apr., 1876—Guadalupe; Bryant, Bull. Calif. Acad. Sci., **2**, p. 281, 1887 (habits); idem, Proc. Calif. Acad. Sci., (2), **2**, p. 282, 1889; Lucas, Auk, **8**, p. 219, 1891 (skeleton); Bendire, Life Hist. N. Amer. Bds., **1**, p. 318, 1892 (ecology); Rothschild and Hartert, Nov. Zool., **9**, p. 404, 1902 (eight spec. coll. in 1900); Kaeding, Condor, **7**, p. 134, 1905; Thayer and Bangs, l.c., **10**, p. 106, 1908; Swarth, l.c., **15**, p. 229, 1913; Swann, Syn. List Accip., p. 8, 1919; idem, Syn. Accip., p. 13, 1921; idem, Monog. Bds. Prey, **1**, p. 73, pls. 3, 4 (egg), 1925 (monog.); Grinnell, Univ. Calif. Pub. Zool., **32**, p. 113, 1929; Peters, Bds. World, **1**, p. 281, 1931; Bent, Bull. U. S. Nat. Mus., **170**, p. 136, 1938 (life hist.).

Range.—Guadalupe Island, off Lower California. Now extinct.

Subfamily POLIHIERACINAE. Pygmy Falcons

Genus **SPIZIAPTERYX** Kaup[1]

Spiziapteryx Kaup, Proc. Zool. Soc. Lond., **19**, "1851," p. 43, pub. Oct. 28, 1852—type, by monotypy, *Harpagus circumcinctus* Kaup.

Hemiiërax Burmeister, Reise La Plata St., **2**, p. 437, 1861—type, by orig. desig., *Harpagus circumcinctus* Kaup.

Hemihierax Sharpe, Cat. Bds. Brit. Mus., **1**, p. 371, 1874 (emendation).

*Spiziapteryx circumcinctus (Kaup). SPOTTED-WINGED FALCON.

Harpagus circumcinctus Kaup, Proc. Zool. Soc. Lond., **19**, "1851," p. 43, pub. Oct. 28, 1852—"Chili"[2]=Mendoza, Argentina (type, collected by T. Bridges, in coll. of Lord Derby, now in Liverpool Museum).

Falco punctipennis Burmeister, Journ. Orn., **8**, p. 242, 1860—"Biga de la Paz, Pampa,"=La Paz, Mendoza, Argentina (type in Halle Museum examined); Sclater, Ibis, 1861, p. 200 (crit.).

Hemiiërax circumcinctus Burmeister, Reise La Plata St., **2**, p. 438, 1861—"Biga de la Paz (Coricorto), Pampa,"=La Paz, Mendoza (full descr.); Doering, Period. Zool. Arg., **1**, p. 247, 1874—(?)between La Paz and Rio Guayquiraro, northern Entre Ríos, and (certè) Sierra de Córdoba; Stempelmann and Schulz, Bol. Acad. Nac. Cienc. Córdoba, **10**, p. 396, 1890—Córdoba.

Falco circumcinctus Sclater, Ibis, 1862, p. 23, pl. 2 (crit.; fig. of type in Liverpool Museum).

Spiziapteryx circumcinctus Sharpe, Cat. Bds. Brit. Mus., **1**, p. 371, 1874—Argentina; Gurney, Ibis, 1881, p. 276—Mendoza (crit.); White, Proc.

[1] This genus, regarded by Martorelli as representative of a separate subfamily (Spiziapteryginae), seems to us to have very close affinities to *Gampsonyx*, *Polihierax*, *Microhierax*, and *Neohierax*, and should be kept in the same group (cf. also Sushkin, Nouv. Mém. Soc. Nat. Moscou, **16**, livr. 4, pp. 178, 180, 1905).

[2] This locality is unquestionably erroneous. It is a well-known fact that many of the specimens secured by Thomas Bridges near Mendoza were incorrectly labeled "Chili," probably through a mistake of his European agent.

Zool. Soc. Lond., 1882, p. 623—Guazón, Andalgalá, Catamarca; Sclater and Hudson, Arg. Orn., **2**, p. 73, 1889 (habits); Frenzel, Journ. Orn., **39**, p. 114, 1891—foothills of Sierra de Córdoba; Koslowsky, Rev. Mus. La Plata, **6**, p. 285, 1895—Chilecito, La Rioja; Martorelli, Atti Soc. Ligust. Sci. Nat. Geog., **10**, p. 169, pl. 6, 1900—Mendoza and Cosquin (Córdoba), Argentina (crit.; descr.); Lillo, Anal. Mus. Nac. Buenos Aires, **8**, p. 205, 1902—Rio Salí, Tucumán; Bruch, Rev. Mus. La Plata, **11**, p. 251, 1904—Orán, Salta; Lillo, Rev. Letr. Cienc. Soc., **3**, No. 13, p. 63, 1905—Rio Salí, Tucumán; Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 249, 1910—Córdoba, Santiago del Estero, Catamarca, Tucumán, and Salta (Orán); Reed, Av. Prov. Mendoza, p. 22, 1916—El Challao and Sopanta; Swann, Syn. List Accip., p. 119, 1920—Argentina; idem, Syn. Accip., p. 184, 1922—Argentina (chars.); Giacomelli, El Hornero, **3**, p. 78, 1923—La Rioja; Wetmore, Bull. U. S. Nat. Mus., **133**, p. 100, 1926—Victorica, Pampa, and between Quilino and Córdoba, Córdoba; Pereyra, El Hornero, **4**, p. 29, 1927—Conhelo, Pampa Central; Peters, Bds. World, **1**, p. 281, 1931 (range); Castellanos, El Hornero, **5**, p. 12, 1932—Valle de los Reartes, Córdoba, and Alefú, Pampa Central; Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **19**, p. 285, 1932 (not in Chile); Swann, Monog. Bds. Prey, **2**, p. 333, 1936—Argentina (monog.); Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 478, 1936—Córdoba (Tanti Viejo, Tilquicho), La Rioja (Chilecito), and San Luis (Piedra Blanca, Santa Rosa).

Range.—Western and northern Argentina in provinces of Salta (Orán), Tucumán, Santiago del Estero, Catamarca, La Rioja, San Luis, Mendoza, Córdoba, Pampa, and possibly parts of Santa Fé.[1]

Field Museum Collection.—2: Argentina (Los Ternos, Santiago del Estero, 2).

Genus GAMPSONYX Vigors

Gampsonyx Swainson, Zool. Journ., **2**, No. 5, p. 69, April, 1825—type, by monotypy, *Gampsonyx swainsonii* Vigors.

*Gampsonyx swainsonii swainsonii Vigors. SWAINSON'S PEARL HAWK.

Gampsonyx Swainsonii(i) Vigors, Zool. Journ., **2**, No. 5, p. 69, April, 1825—tableland of Bahia (about ten leagues west-southwest from the Bay of San Salvador), Brazil (type in coll. of W. Swainson, now in the University Museum, Cambridge, England); Gray and Mitchell, Gen. Bds., **1**, p. 26, pl. ix, 1845; Burmeister, Syst. Uebers. Th. Bras., **2**, p. 114, 1856—Bahia (hab. in part, excl. of Guiana); Sclater and Salvin, Proc. Zool. Soc. Lond., 1867, p. 979—Pebas, Peru (spec. examined); Pelzeln, Orn. Bras., **1**, p. 6,

[1] Doering's sight record from northern Entre Ríos (between La Paz and the Rio Guayquiraro) requires substantiation by specimens, as this falcon has never been taken east of the Rio Paraná.

Three specimens from Córdoba (Cosquin), one from Mendoza, and two from Santiago del Estero examined.

1868—part, Matto Grosso (Cuyabá, Pari, Barra do Jaurú, Caiçara, Estiva); Sclater and Salvin, Proc. Zool. Soc. Lond., 1873, p. 303—Pebas, Peru; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 304, 1874—part, spec. a–c, e, Brazil, Bahia, and "Trinidad"; Gurney, Ibis, 1879, p. 330—upper Amazon (descr. of young); Forbes, Ibis, 1881, p. 353—near Parahyba, Brazil; Taczanowski, Orn. Pér., **1**, p. 140, 1884—part, Pebas, Peru; Riker and Chapman, Auk, **7**, p. 161, 1891—Santarem, Brazil; Allen, Bull. Amer. Mus. N. H., **5**, p. 148, 1893—Chapada, Matto Grosso; Salvadori, Boll. Mus. Zool. Torino, **12**, No. 292, p. 30, 1897—Campo Santo, Salta; idem, l.c., **15**, No. 378, p. 14, 1900—Urucúm, Matto Grosso; Lillo, Anal. Mus. Nac. Buenos Aires, **8**, p. 205, 1902—Tucumán; Lönnberg, Ibis, 1903, p. 465—Colonia Crévaux, Tarija, Bolivia; Lillo, Rev. Letr. Cienc. Soc., **3**, No. 13, p. 63, 1905—Tucumán; Ihering, Cat. Faun. Braz., **1**, p. 97, 1907—Bahia (range in part); Snethlage, Journ. Orn., **56**, p. 22, 1908—Cachoeira and Bom Lugar, Rio Purús, Brazil; Hellmayr, Nov. Zool., **17**, p. 413, 1910—Calama, Rio Madeira, Brazil; Reiser, Denks. Math.-Naturw. Kl. Akad. Wiss. Wien, **76**, p. 90, 1910—Bahia (Barra do Rio Grande; Estreito da Ursa, Rio Preto) and Piauhy (Pedrinha, Lagõa do Parnaguá; Serra of Santa Philomena); Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 248, 1910—Tucumán and Salta; Snethlage, Bol. Mus. Goeldi, **8**, p. 139, 1914—part, Bragança (E.F.R.), Cussary, Rio Purús (Cachoeira, Bom Lugar), and Maranhão; idem, Bol. Mus. Nac. Rio de Janeiro, **2**, No. 6, p. 47, 1926—Ceará.

Elanus torquatus (Cuvier MS.) Lesson, Traité d'Orn., livr. 1, p. 72, Feb., 1830—Brazil (type in Paris Museum; cf. Pucheran, Rev. Mag. Zool., (2), **2**, p. 14, 1850).

Falco rufifrons Wied,[1] Beitr. Naturg. Bras., **3**, p. 123, 1830—Rio Mucurí, southern Bahia, Brazil (type not preserved; cf. also Allen, Bull. Amer. Mus. N. H., **2**, p. 268, 1889).

Gampsonyx swainsonii swainsonii Chubb, Ibis, 1919, p. 287—part, Brazil (Matto Grosso, Bahia) and eastern Peru; Swann, Syn. List Accip., p. 103, 1920—Brazil and Paraguay; idem, Syn. Accip., p. 163, 1922 (chars.; range); Wetmore, Bull. U. S. Nat. Mus., **133**, p. 104, 1926—200 km. west of Puerto Pinasco, Paraguay; Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **12**, p. 457, 1929—São Francisco, Maranhão, and Juá (near Iguatú), Ceará; Naumburg, Bull. Amer. Mus. N. H., **60**, p. 112, 1930—Matto Grosso; Laubmann, Wiss. Erg. Deuts. Gran Chaco Exp., Vögel, p. 98, 1930—Yuncá Viejo, Formosa; Peters, Bds. World, **1**, p. 282, 1931 (range); Stone and Roberts, Proc. Acad. Nat. Sci. Phila., **86**, p. 373, 1934—Descalvados, Matto Grosso; Swann, Monog. Bds. Prey, **2**, p. 271, 1936 (monog.); Pinto, Rev. Mus. Paul., **19**, p. 106, 1935—Bahia (Rio Gongogy, Corupéba, Boim, Joazeiro); Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 480, 1936 (range).

Range.—Brazil from the south bank of the Amazon to Bahia, Rio de Janeiro, and Matto Grosso; eastern Peru (Pebas);[2] eastern

[1] *Nertus rufifrons* Boie (Isis, 1828, col. 314), ex Wied MS., is a nomen nudum without nomenclatural standing.

[2] We do not find any authentic record from eastern Ecuador.

Bolivia; northern Argentina (Campo Santo, Salta; Tucumán; Yuncá Viejo, Formosa); western Paraguay (west of Puerto Pinasco).[1]

Field Museum Collection.—8: Brazil (São Francisco, Maranhão, 1; Juá, near Iguatu, Ceará, 1); Bolivia (San Gavier, Santa Cruz, 1); Paraguay (195 km. west of Puerto Casado, 4; Orloff, Chaco, 1).

Gampsonyx swainsonii leonae Chubb.[2] NORTHERN PEARL HAWK.

Gampsonyx swainsonii leonae Chubb, Bull. Brit. Orn. Cl., **39**, p. 22, Nov. 30, 1918—León, Nicaragua (type in British Museum examined); Swann, Syn. List Accip., p. 104, 1920—Nicaragua; Miller and Griscom, Amer. Mus. Nov., **25**, p. 13, 1921—Nicaragua, Venezuela, and Santa Marta (crit.); Swann, Syn. Accip., p. 164, 1922—Nicaragua; Peters, Bds. World, **1**, p. 28, 1931 (range); Belcher and Smooker, Ibis, 1934, p. 593—Trinidad (Caroni River and Mount Hope); Swann, Monog. Bds. Prey, **2**, p. 273, 1936—León, Nicaragua.

[1] There does not seem to be any constant difference between birds from various parts of the above range. Brazilian specimens, as a rule, lack the rufous color on the sides of the body or show there only a few ochraceous-buff or tawny streaks. However, one (out of nine) from Bahia and one (out of four) from Caiçara, Matto Grosso, have just as extensive a rufous area on the upper flanks as any from Guiana or Venezuela. A single adult male from Maranhão (Miritiba) has no trace of rufous, while one from Santarem, like others from Bahia and Matto Grosso, exhibits a few dull tawny streaks, and thus extends the range of the typical race to the southern bank of the Amazon. An adult female from Pebas, Peru, and one from Bolivia (Buena Vista) cannot be distinguished, either in size or color, from the Brazilian average.

Wing measurements.—Adult males: Santarem, 155; Miritiba, Maranhão, 148; Bahia, 145, 148, 148, 153, 153, 153; Piauhy, 148, 152; Rio de Janeiro, 158; Matto Grosso (Caiçara), 158. Adult females: Pebas (Peru), 162; Matto Grosso (Caiçara, Chapada), 160, 161, 162, 167, 168; Bahia, 158, 165; Yuncá Viejo, Formosa, 167; Buena Vista (Bolivia), 169.

[2] *Gampsonyx swainsonii leonae* Chubb: Similar to *G. s. swainsonii*, but with an extensive rufous area on the sides of the body, which varies in color regardless of sex, locality and age, from ochraceous-tawny to chestnut.

While this character holds in the great majority of individuals, exceptions are occasionally met with, three specimens from Mérida (Escorial, Oct. 21; Valle, Oct. 29 and Dec. 18) and one from British Guiana having, like the average of typical *swainsonii*, but a few buffy or tawny streaks on the flanks. The yellow on front and sides of the head, in this form, is generally paler, less yellow ocher, but some birds from Guiana and Mérida are very nearly as dark about the face as Bahia skins (*swainsonii*).

Good series from the Mérida region (*meridensis*) and British Guiana agree well together, and one adult each from the upper Rio Branco and Obidos are also perfectly typical examples, having an extensive patch of chestnut on the sides of the lower breast. We are, however, unable to separate this lot from two Nicaraguan specimens (*leonae*), this identity having already been suggested by Miller and Griscom. Both Nicaraguan birds have a distinct, though not exceedingly extensive, deep tawny patch on the sides like a good many from Mérida. The type of *leonae* has exceptionally pale yellow about the face (though one from Valle, Mérida, is just as pale), but the female from León, in this respect, exactly resembles the average from Venezuela. Swann's attempt to maintain the distinctness of the two races is not supported by the large series in the British Museum, as neither

Gampsonyx swainsonii(*i*) (not of Vigors) Cabanis, in Schomburgk, Reisen Brit. Guiana, **3**, "1848," p. 735, 1849—Rio Rupununi; Léotaud, Ois. Trinidad, p. 41, 1866—Trinidad (one male); Pelzeln, Orn. Braz., **1**, p. 6, 1868—part, Forte do Rio Branco, Brazil (spec. examined); Sclater and Salvin, Proc. Zool. Soc. Lond., 1869, p. 252—Maruria, Lake of Valencia, Venezuela; Finsch, l.c., 1870, p. 557—"Trinidad"; Ridgway, Bull. U. S. Geol. Geog. Surv. Terr., **2**, No. 2, p. 151, 1876—Savanilla, Colombia; Gurney, Ibis, 1879, p. 331—Santa Marta; Salvin, Ibis, 1886, p. 77—Merumé Mountains, British Guiana; idem, Ibis, 1893, p. 264—León, Nicaragua; Allen, Bull. Amer. Mus. N. H., **13**, p. 131, 1900—Bonda, Colombia; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 98, 1901—León, Nicaragua; Robinson and Richmond, Proc. U. S. Nat. Mus., **24**, p. 168, 1901—San Julián, near La Guaira, Venezuela; Berlepsch and Hartert, Nov. Zool., **9**, p. 114, 1902—Rio Orinoco (Altagracia, Caicara, Quiribana de Caicara, Ciudad Bolivar) and Suapuré, Caura, Venezuela; Clark, Auk, **19**, p. 261, 1902—El Valle, Margarita Island; Cory, Field Mus. Nat. Hist., Orn. Ser., **1**, p. 241, 1909—Porlamar, Margarita Island; Snethlage, Bol. Mus. Goeldi, **8**, p. 139, 1914—part, Monte Alegre, Brazil; Chubb, Bds. Brit. Guiana, **1**, p. 271, 1916—Upper Takutu Mountains, Rupununi River, Merumé Mountains, and Annai; Cherrie, Sci. Bull., Mus. Brookl. Inst., **2**, p. 346, 1916—savanna regions of the Middle Orinoco; Todd and Carriker, Ann. Carnegie Mus., **14**, p. 144, 1922—Bonda, Gaira, Mamatoco, Dibulla, Fundación, and Santa Marta, Colombia; Dugand, Rev. Acad. Colomb. Cienc., Bogotá, **4**, p. 397, pl. 1, fig. 3, pl. 3, fig. 20, 1941—Colombia.

Gampsonyx swainsonii swainsonii (not of Vigors) Chubb, Ibis, 1919, p. 287—part, Venezuela, Trinidad, British Guiana, and Obidos.

Gampsonyx swainsoni meridensis Swann, Syn. List Accip., p. 104, 1920—Nevados, Mérida, Venezuela (type in coll. of H. K. Swann, now in Museum of Comparative Zoology, Cambridge, Mass.); idem, Auk, **38**, p. 363, 1921—Nevados and Valle, Mérida; idem, Syn. Accip., p. 163, 1922—Venezuela to British Guiana; Darlington, Bull. Mus. Comp. Zool., **71**, p. 365, 1931—near Rio Frio, Magdalena, Colombia; Swann, Monog. Bds. Prey, **2**, p. 273, 1936 (monog.).

Range.—Western Nicaragua (León) and Santa Marta region of Colombia east through Venezuela to British Guiana[1] and south to the north bank of the lower Amazon, Brazil (Monte Alegre, Obidos).

the larger size of the Nicaraguan birds nor any of the supposed color differences exist. Birds from Margarita Island are slightly smaller, but the constancy of this divergency needs confirmation by an adequate series.

Wing measurements.—Adult males: León, Nicaragua, 158; Mérida, Venezuela, 150–157; British Guiana, 150–158; Obidos, Brazil, 152. Adult females: León, Nicaragua, 160; Mérida, 158–163; British Guiana, 158–162; Forte do São Joaquim, Rio Branco, Brazil, 160.

Additional material examined.—Nicaragua: León, 2.—Venezuela: Valle, Mérida, 15; Escorial, Mérida, 1; Caracas, 1.—British Guiana, Upper Takutu Mountains, 3; Great Savanna, 1; Quonga, 1; Annai, 2; Merumé Mountains, 1; unspecified, 1.—Brazil: Forte do São Joaquim, Rio Branco, 1; Obidos, 1.

[1] Not yet recorded from French Guiana. Cf. Berlepsch, Nov. Zool., **15**, p. 293, 1908.

Field Museum Collection.—13: Nicaragua (San Gerónimo, Chinandega, 1); Venezuela (El Valle, Merida, 2; Puerto Cabello, Carabobo, 1; Maracay, Aragua, 2; Porlamar, Margarita Island, 1); British Guiana (Buxton, 3); Brazil (Bõa Vista, Rio Branco, Amazonas, 2; Monte Alegre, Pará, 1).

Gampsonyx swainsonii magnus Chubb.[1] WESTERN PEARL HAWK.

Gampsonyx swainsonii magnus Chubb, Bull. Brit. Orn. Cl., **39**, p. 21, Nov. 30, 1918—Amotape, [Dept. Piura], Peru (type in British Museum examined); idem, Ibis, 1919, p. 288—western Ecuador (Guayaquil, Puná Island) and Peru (Amotape, Piura); Swann, Syn. List Accip., p. 104, 1920 (chars.; range); idem, Syn. Accip., p. 164, 1922 (chars.; range); Chapman, Bull. Amer. Mus. N. H., **55**, p. 238, 1926—Ecuador (Manaví, Puná Island, Portovelo); Peters, Bds. World, **1**, p. 282, 1931 (range); Swann, Monog. Bds. Prey, **2**, p. 274, 1936 (monog.).

Gampsonyx swainsoni (not of Vigors) Sharpe, Cat. Bds. Brit. Mus., **1**, p. 340, 1874—part, spec. d, Guayaquil; Taczanowski, Proc. Zool. Soc. Lond., 1877, p. 745—Tumbez, Peru; idem, Orn. Pér., **1**, p. 140, 1884—part, Tumbez.

Range.—Arid Tropical zone of western Ecuador (Manaví; Guayaquil; Puná Island; Portovelo) and northwestern Peru (Tumbez; Amotape, Piura).

Subfamily FALCONINAE. Falcons

Genus FALCO Linnaeus

Falco Linnaeus, Syst. Nat., 10th ed., **1**, p. 88, 1758—type, by subs. desig. (Brit. Orn. Un-Comm., List of British Birds, p. 149, 1915),[2] *Falco Subbuteo* Linnaeus.

Tinnunculus Vieillot, Hist. Nat. Ois. Amér. Sept., **1**, p. 39, 1807—type, by subs. desig. (Walden, Trans. Zool. Soc. Lond., **8**, p. 34, note, 1872), *Falco columbarius* Linnaeus.

Hierofalco Cuvier, Regne Anim., **1**, p. 312, "1817" (=Dec. 7, 1816)—type, by monotypy, *Falco candicans* Linnaeus.

Hypotriorchis Boie, Isis, 1826, col. 976—type, by virtual monotypy, *Falco Subbuteo* Linnaeus.

[1] *Gampsonyx swainsonii magnus* Chubb: Similar to *G. s. leonae* in paleness of sides of face and in having an extensive rufous area on the sides of the breast, but decidedly larger. Wing, 170 (male) to 176 (female); tail, 104–108.

Material examined.—Ecuador: Guayaquil, 1; Puná Island, 2.—Peru: Amotape, 1; Piura, 1.

[2] The A. O. U. Committee (1886), though generally credited with designating the genotype, unfortunately failed to do so, but merely determined *Falco subbuteo* as type by employing the inadmissible method of elimination.

Cerchneis Boie, Isis, 1826, col. 976—type, by virtual monotypy, *Falco rupicola* "Lichenstein" (=Daudin).

Aesalon Kaup, Skizz. Entw. Europ. Thierw., **1**, p. 40, 1829—type, by tautonymy, *Falco aesalon* Tunstall.

Rhynchodon Nitzsch, Observ. Av. Art. Carot. Comm., p. 20, 1829—type, by subs. desig. (A. O. U. Comm., Check List N. Amer. Bds., p. 74, 1931),[1] *Falco peregrinus* Tunstall.

Pnigohierax Cabanis, Journ. Orn., **20**, p. 156, 1872—type, by orig. desig., "*P. lanarius* (Pallas)"=*Falco cherrug* Gray.

Rhynchofalco Ridgway, Proc. Bost. Soc. N. H., **16**, p. 46, May, 1873—type, by orig. desig., *Falco femoralis* Temminck=*Falco fusco-caerulescens* Vieillot.

Neofalco Ridgway, Man. N. Amer. Bds., p. 248, 1887—type, by orig. desig., *Falco albigularis* auct.

Eufalco Aclogue, Faune de France, **1**, p. 113, 1900—type, by subs. desig. (Richmond, Proc. U. S. Nat. Mus., **53**, p. 589, 1917), *Falco communis* Gmelin=*Falco peregrinus* Tunstall.

Archifalco Boetticher, Anz. Orn. Ges. Bayern, No. 11, p. 112, 1927—type, by orig. desig., *Falco peregrinus* Tunstall.

Falco mexicanus Schlegel. PRAIRIE FALCON.

Falco mexicanus (Lichtenstein MS.) Schlegel, Abhandl. Geb. Zool., Heft 3, p. 15, 1843—Mexico (type in Berlin Museum); Schlegel, Mus. Pays-Bas, Falcones, p. 18 (note), 1862 (type stated to be from Monterey; descr.); Bendire, Life Hist. N. Amer. Bds., **1**, p. 288, pl. 10, figs. 2, 3 (egg), 1892 (ecology); Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 115, 1901—North America south to Mexico (Hermosillo, Sonora; Zacatecas; Aguas Calientes); Swann, Syn. List Accip., p. 129, 1920 (chars.; range); idem, Syn. Accip., p. 207, 1922 (range); Grinnell, Univ. Calif. Pub. Zool., **32**, p. 111, 1929—Lower California; Peters, Bds. World, **1**, p. 286, 1931 (range); Swann, Monog. Bds. Prey, **2**, p. 414, 1936 (monog.); Bent, Bull. U. S. Nat. Mus., **170**, p. 18, 1938 (life hist.); Webster, Auk, **61**, p. 609, pl. 27, 1944—Colorado (life hist.); van Rossem, Occ. Pap., Mus. Zool. Louisiana State Univ., **21**, p. 62, 1945—Sonora (distrib.).

Falco polyagrus Cassin, Ill. Bds. California, etc., p. 88, 1853—source of the Platte River, California and Puget Sound (type from source of the Platte, in the Academy of Natural Sciences, Philadelphia; cf. Stone, Proc. Acad. Nat. Sci. Phila., **51**, p. 29, 1899); idem, l.c., p. 121, pl. 16, 1854—part, California (full descr. of adult and young); Coues, Proc. Acad. Nat. Sci. Phila., 1866, p. 43—Arizona (crit.).

Pnigohierax mexicanus Cabanis, Journ. Orn., **20**, p. 156, 1872—Tehuantepec, Mexico (crit.).

Hierofalco mexicanus Sharpe, Cat. Bds. Brit. Mus., **1**, p. 420, 1874.

Falco lanarius var. *polyagrus* Baird, Brewer, and Ridgway, Hist. N. Amer. Bds., **3**, p. 123, 1874 (monog.).

[1] In the earlier editions of "Check List of North American Birds," the genotype was determined "by elimination."

Range.—Transition and Austral zones from the eastern border of the Great Plains and from southern British Columbia, southern Alberta and southeastern Saskatchewan to southern Lower California and (probably in winter only) to southern Mexico; casual east to Manitoba, Minnesota and Illinois.[1]

Field Museum Collection.—21: Alberta (Rosebud, 2); Oregon (Wallowa County, 1); California (Wasco, 1; Corona, 1; Colusa, 2; Newark, 1; San Bernardino County, 1); Utah (Beaver County, 1); Colorado (El Paso County, 1; Fort Lyon, 1); Arizona (Camp Verde, 1); New Mexico (Socorro County, 1); North Dakota (Cooperstown, 1; Towner County, 3; Nelson County, 1); South Dakota (Aberdeen, 1); Mexico (Babicora, Chihuahua, 1).

*Falco rusticolus obsoletus Gmelin. GREENLAND GYRFALCON.

Falco fuscus (not of Miller, 1777) Fabricius, Faun. Groenl., p. 56, 1780—Greenland.

Falco obsoletus Gmelin, Syst. Nat., **1**, (1), p. 268, 1788—based on "Plain Falcon" Pennant, Arct. Zool., **2**, p. 208, Hudson Bay.

Falco candicans Gmelin, Syst. Nat., **1**, (1), p. 275, 1788—based on "Gyrfalco Aldrovandi, Gerfault" of Brisson and Buffon, etc., no locality given= Greenland (as substituted by Hartert, Vog. Palar. Fauna, **2**, p. 1064, 1913); Schlegel, Abh. Geb. Zool., Heft 3, p. 14, 1843—part, Greenland and Arctic America (crit.).

Falco groenlandica Turton, Gen. Syst. Nat., **1**, p. 147, 1802—Greenland.

Falco labradora(us) Audubon, Bds. Amer., pl. 196 (=melanism), 1834; Dresser, Proc. Zool. Soc. Lond., 1875, p. 115 (crit.); idem, in Rowley, Orn. Misc., **1**, (3), p. 185, pls. 1 (adult), 2 (young), 1876—Labrador (descr.).

Falco arcticus Holboell, Zeits. Ges. Naturw. (Halle), **3**, p. 426, 1854—Godthaab, Greenland.

Falco dawsonis Hall, Canad. Nat. and Geologist, **7**, p. 62, 1862—Lachine, Quebec (type in Museum of Natural History Society, Montreal); Ridgway, Bull. Nutt. Orn. Cl., **5**, p. 92, 1880 (crit.).

Hierofalco holboelli Sharpe, Proc. Zool. Soc. Lond., 1873, p. 415—Greenland (type in British Museum); idem, Cat. Bds. Brit. Mus., **1**, p. 415, pl. 13, 1874—Greenland.

Hierofalco candicans Sharpe, Cat. Bds. Brit. Mus., **1**, p. 411, 1874—Greenland, Labrador, etc.

Hierofalco gyrfalco obsoletus Ridgway, Bull. Nutt. Orn. Cl., **5**, p. 92, 1880—Labrador (descr. of adult; crit.).

Falco rusticolus candicans Hartert, Vog. Pal. Fauna, **2**, p. 1064, 1913—Greenland and Arctic America (crit.); Swann, Syn. Accip., p. 209, 1922 (crit.);

[1] In addition to a good series from the United States, we have examined in the British Museum two from Hermosillo, Sonora (Nov. 28, Dec. 22; J. Ferrari-Perez), one from Zacatecas (Mar. 25; W. B. Richardson) and one from Aguas Calientes (Aug., 1888; W. B. Richardson).

Peters, Bds. World, **1**, p. 286, 1931—Greenland and high Arctic America; Schiøler, Danm. Fugle, **3**, p. 367, pls. 82–85, 1931—East Greenland and northern West Greenland (monog.); Bent, Bull. U. S. Nat. Mus., **170**, p. 1, 1938 (life hist.); Bird, Ibis, 1941, p. 132—Myggbukte, Lock Fine, N. E. Greenland (race of N. and N. E. Greenland only); Bray, Auk, **60**, p. 515, 1943—Admiralty Inlet, Baffin Island (nesting).

Falco rusticolus obsoletus Swann, Syn. List Accip., p. 131, 1920—Labrador and Newfoundland (crit.); Peters, Bds. World, **1**, p. 287, 1931—Arctic America, from northern Alaska to Labrador; Schiøler, Danm. Fugle, **3**, p. 357, pls. 77, 78, 1931—Greenland (monog.); Swann, Monog. Bds. Prey, **2**, p. 420, 1936 (monog.); Bent, Bull. U. S. Nat. Mus., **170**, p. 10, 1938 (life hist.); Porsild, Canad. Field Nat., **57**, p. 26, 1943—Mackenzie Delta (breeding); Soper, Auk, **63**, p. 224, 1946—Baffin Island.

Falco rusticolus sacer Swann,[1] Verh. 6th Orn. Kongr. Kopenhagen, p. 573, 1929 (crit.).

Falco rusticolus holboelli Schiøler, Danm. Fugle, **3**, p. 361, pls. 80, 81, 1931—southern Greenland (monog.).

Range.—Breeds on the coasts of Greenland and in Arctic America from Labrador to Alaska; wanders irregularly in winter south to British Columbia and the northern United States.[2]

Field Museum Collection.—11: British Columbia (Lulu Island, Vancouver, 1); Greenland (Sukkertoppen, 3; Egedesminde, 1; unspecified, 2); North Dakota (Nelson County, 2); Massachusetts (Essex County, 2).

*Falco rusticolus uralensis (Severtzov and Menzbier).[3] ASIATIC GYRFALCON.

Hierofalco uralensis Severtzov and Menzbier, Uch. Zapiski Mosk. Univers., **2**, Nos. 2–3, p. 288, pl. 3, 1882—Ural Mountains, Russia (type in Leningrad Museum).

[1] *Falco sacer* Forster (Phil. Trans., **62**, pp. 383, 423, 1772—Severn River, Hudson Bay) may be an earlier name, as has been claimed by Preble and McAtee (N. Amer. Fauna, **46**, p. 82, 1923), but the description offers certain ambiguities so that its adoption seems inadvisable. Newton thought Forster's account might refer to *Accipiter gentilis atricapillus* Wilson.

[2] It is now conceded that, excepting the extreme northwest, there is only one form of Gyrfalcon in the Western Hemisphere, although the abundance of the white or dark phase may vary in different parts of Arctic America. In Schiøler's posthumous work, three races are still admitted for Greenland, and Koelz (Wilson Bull., **41**, pp. 207–219, 1929) also advocates the designation of the various color-types (or phases) by different names, thus abandoning the geographical conception of what we used to call races. While Austin (Mem. Nutt. Orn. Cl., **7**, pp. 67, 69, 1932) also upholds the distinction between the northerly *candicans* and the more southerly *obsoletus*, Friedmann is inclined to unite *candicans* and *obsoletus*.

[3] Birds from Bering Island (*grebnitzku*) and Alaska (*alascanus*) are not properly separable from *uralensis*.

Hierofalco grebnitzku Severtzov, Nou. Mem. Soc. Imp. Nat. Moscou, **15**, livr. 3, p. 69, col. pl., 1885—Bering Island (type in Leningrad Museum); Dementieff, Alauda, (2), **3**, p. 502, 1931 (crit.).

Falco rusticolus alascanus Swann, Bull. Brit. Orn. Cl., **42**, p. 67, Feb. 2, 1922—Norton Bay (=Sound), Alaska (type in U. S. National Museum); idem, Syn. Accip., p. 208, 1922 (chars.; range); idem, Verh. 6th Orn. Kongr. Kopenhagen, p. 572, 1929—Alaska.

Falco rusticolus uralensis Swann, Monog. Bds. Prey, **2**, p. 419, 1936 (monog.); Bent, Bull. U. S. Nat. Mus., **170**, p. 15, 1938 (life hist.).

Range.—Northern Asia from western Siberia to Kamtchatka, islands in the Bering Sea, and Bering Sea coast of Alaska; south in winter casually to Washington (Spokane).

Field Museum Collection.—3: Alaska (St. George Island, 2; Nushagak, 1).

*Falco peregrinus anatum Bonaparte. DUCK HAWK.

Falco anatum Bonaparte, Geog. Comp. List Bds. Eur. and N. Amer., p. 4, 1838—based on *Falco peregrinus* Wilson, Amer. Orn., **9**, p. 120, pl. 76, 1814, Great Egg Harbour, New Jersey (type in coll. of R. T. Peale, now in Museum of Comparative Zoology, Cambridge, Mass.; cf. Bangs, Bull. Mus. Comp. Zool., **70**, p. 193, 1930); Léotaud, Ois. Trinidad, p. 22, 1866—Trinidad (December); Taczanowski, Proc. Zool. Soc. Lond., 1874, p. 550—Junin and Chorillos, Peru.

Falco communis amcricanus (sic) Schlegel, Abh. Geb. Zool. Vergl. Anat., Heft 3, p. 19, 1843—substitute name for *F. anatum* Bonaparte.

Falco nigriceps Cassin, Illus. Birds Calif., Texas, etc., p. 87, circa Feb. 7, 1854—Bear Creek (California), coast of Lower California and Chile (type, from Bear Creek=Bear River, California, at one time in collection of the Academy of Natural Sciences of Philadelphia [cf. Stone, Proc. Acad. Nat. Sci. Phila., 1899, p. 29], but not now to be found [cf. Grinnell, Univ. Calif. Pub. Zool., **38**, p. 267, 1932]); idem, in Gilliss, U. S. Ast. Exp., **2**, p. 176, pl. 14, 1855—Chile (spec. examined).

Falco communis (not of Gmelin) Pelzeln, Verh. Zool. Bot. Ges. Wien, **13**, p. 632, 1863—Praia de Cajutuba, Pará (March; soft parts); idem, Reise Nov., Zool., **1**, Vögel, p. 8, 1865—Santiago, Chile (spec. examined); idem, Orn. Bras., **1**, p. 5, 1867—Praia de Cajutuba, Pará (spec. examined).

Falco peregrinus Sclater, Proc. Zool. Soc. Lond., 1867, pp. 330, 338—Chile (crit.); Philippi, Anal. Univ. Chile, **31**, p. 244, 1868—Chile (in part); Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 114, 1901—Mexico to Veraguas; Helm, Vidensk. Medd. Naturhist. Foren., 1904, p. 109—Angmagsalik, Greenland (Oct. 7, 1901); Ménégaux, Rev. Franç. d'Orn., **5**, p. 37, 1917—Caceres, Matto Grosso.

Falco communis var. *anatum* Baird, Brewer, and Ridgway, Hist. N. Amer. Bds., **3**, p. 132, 1874—part, excl. of Tierra del Fuego (monog.).

Falco cassini (not of Sharpe) Holmberg, Act. Acad. Nac. Cordoba, **5**, p. 76, 1884—Sierre de la Tinta, Buenos Aires (Feb. 11); Taczanowski, Orn.

Per., **1**, p. 147, 1884—Peru (Junín, Chorillos) and French Guiana (Cayenne); Berlepsch and Stolzmann, Proc. Zool. Soc. Lond., 1892, p. 388—Lima, Peru (March 4); (?)Lönnberg, Ibis, 1903, p. 453—Tolomosa, Tarija, Bolivia (Feb. 8).

Falco peregrinus anatum Hellmayr, Nov. Zool., **13**, p. 46, 1906—Seelet, Trinidad (April 5); Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 415, 1910 (range in Argentina); Swann, Syn. List Accip., p. 122, 1920 (range); idem, Syn. Accip., p. 199, 1922 (range); Todd and Carriker, Ann. Carnegie Mus., **14**, p. 159, 1922—Bonda, Colombia (Oct. 20); Lönnberg and Rendahl, Ark. Zool., **14**, No. 25, p. 42, 1922—Pichincha (Oct.), Chaupicruz (May), and Pomasqui (June 20, Sept. 20), Ecuador; Chapman, Bull. Amer. Mus. N. H., **55**, p. 239, 1926—Carapungo (July 14) and El Muerto Island (Feb. 26), Ecuador; Grinnell, Univ. Calif. Pub. Zool., **32**, p. 111, 1929—Lower California; Schiøler, Danm. Fugle, **3**, p. 399, pls. 90, 91, 1931—Greenland (monog.); Peters, Bds. World, **1**, p. 290, 1931 (range); Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **19**, p. 280, 1932—Chile (Santiago; Ranco, Temuco, Cautin, March 15); Belcher and Smooker, Ibis, 1934, p. 594—Caroni Swamp, Trinidad (Jan. 17); Griscom, Bull. Mus. Comp. Zool., **78**, p. 302, 1935—Veraguas and Changuinola, Panama; Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 481, 1936 (winter visitant to Argentina); Swann, Monog. Bds. Prey, **2**, p. 387, 1936 (monog.); Bent, Bull. U. S. Nat. Mus., **170**, p. 43, 1938 (life hist.); Pinto, Rev. Mus. Paul., **22**, p. 90, 1938—Barra do Rio Grande, Bahia; Bray, Auk, **60**, p. 515, 1943—Foxe Basin (nesting); Cooke, Bird Banding, **14**, p. 72, 1943 (banded Julianehaab, Greenland, recovered Cuba; banded Wisconsin, recovered Uruguay); Bruner, Mem. Soc. Cub. Hist. Nat., **17**, p. 19, 1943—Cuba; van Rossem, Occ. Pap., Mus. Zool. Louisiana State Univ., **21**, p. 63, 1945—islands in Gulf of California (resident); Borrero, Caldasia, **3**, No. 14, p. 412, 1945—Sabaña de Bogotá; Soper, Auk, **63**, p. 224, 1946—Baffin Island; Niedrach, Auk, **63**, p. 253, 1946—Archuleta County, Colorado (nesting).

Falco peregrinus cassini Penard, Auk, **44**, p. 419, 1927—Kwatta, Surinam (April 19; spec. examined).

Range.—Breeds from Norton Sound, Alaska, northern Mackenzie, Baffin Island and the west coast of central Greenland[1] south to Lower California, Texas, Kansas, Indiana, Pennsylvania and Connecticut, and in the mountains to South Carolina; winters from British Columbia (Vancouver Island), Colorado, and southern New England to the West Indies and South America as far south as Chile (Santiago, Jan. 11; Ranco, Cautin, Mar. 15) and Patagonia (near Coy Inlet, Oct. 19).[2]

[1] There is no doubt whatever that Helm's record of *F. peregrinus* from Angmagsalik, accepted without challenge by Schalow (in Romer and Schaudin, Fauna Artica, **4**, p. 225, 1905), the sole basis for the inclusion of the European Peregrine Falcon among American birds, was due to misidentification—Schiøler had a series from Angmagsalik and refers them all to *anatum*. Cf. also Jourdain, in Bent, Bull. U. S. Nat. Mus., **170**, p. 42, 1938, and Cooke, Bird Banding, **14**, p. 72, 1943.

[2] The North American Duck Hawk extends its winter migration to Chile and southern Argentina. Unquestionable South American specimens examined are the

Field Museum Collection.—31: Alaska (200 miles east of Barrow, 1; Nome, 1; Russian Mission, 1); Yukon Territory (Castle Rock, 1); Alberta (Tofield, 1); Washington (Gray's Harbor, 1); California (San Clemente, 1); Texas (Nueces County, 1); North Dakota (Nelson County, 2; Ramsey County, 1; Towner County, 1); Illinois (Lake Forest, 1); Arctic Canada (Frobisher Bay, Baffin Land, 1); Greenland (Isle of Sar Rardlet, 1; Godthaab, 1; Noonak, 1); Prince Edward Island (Malpeque, 1); Canada (Mergatroid, 1); Maine (unspecified, 1); Massachusetts (Cohasset, 1); Connecticut (West Haven, 1); Florida (Punta Rassa, 1; Chatham Bay, 1; Kissimmee River, 1; West Jupiter, 1); Virgin Islands (Virgin Gorda, 1); Mexico (Sierra de Laguna Mountains, Lower California, 1; Chihuahua, 1); Ecuador (Valle Guallabamba, Esmeraldas, 1; Cerro Cayambe, 1).

***Falco peregrinus pealei** Ridgway. PEALE'S FALCON.

Falco communis var. *Pealei* Ridgway, Bull. Essex Inst., **5**, No. 12, p. 201, Dec., 1873—Oregon and Sitka, Alaska (type from Oregon in U. S. National Museum); idem, in Baird, Brewer and Ridgway, Hist. N. Amer. Bds., **3**, p. 137, 1874 (monog.).

Falco peregrinus pealei Ridgway, Ibis, 1882, p. 297 (note)—Kiska Harbour, Aleutian Islands (descr.); Hartert, Vog. Pal. Fauna, **2**, p. 1048, 1913 (crit.); idem, Nov. Zool., **22**, p. 175, 1915 (crit.); idem, l.c., **27**, pl. 149, 1920—Bering and Copper Islands (crit.); Swann, Syn. List Accip., p. 122, 1920 (range); idem, Syn. Accip., p. 199, 1922 (range); Brooks, Condor, **28**, p. 77, 1926—Queen Charlotte Islands (crit.; range); Peters, Bds. World, **1**, p. 290, 1931 (range); Stegmann, Journ. Orn., **82**, p. 231, 1934—Commander Islands (crit.); Swann, Monog. Bds. Prey, **2**, p. 388, 1936 (monog.); Bent, Bull. U. S. Nat. Mus., **170**, p. 67, 1938 (life hist.).

following: Two in juvenile plumage, Chincha Islands, Peru, Dec. 23, Feb. 16, 1912 (H. O. Forbes); adult male from Est. Espartillar, Buenos Aires, Feb. 17, 1890 (A. H. Holland); adult female from Las Rosas, Prov. Santa Fe, Dec., 1894 (Beales); two adult males, one young female from Ajo, Buenos Aires, Nov. 18, 1917, Dec. 20, 1909, Dec. 5, 1917; an adult male from Lomas de Zamora, Buenos Aires, Nov. 24, 1886 (W. Withington); adult male from Mendoza, Feb., 1871 (Weisshaupt); adult male from Ranco, Temuco, Cautin, Chile, Mar. 15, 1913 (A. C. Saldana); immature female from Santiago, Chile, Jan. 11, 1935 (Platt); adult male and young male from Cajutuba, Pará, Brazil. Besides, we have seen several Chilean examples without date of capture. Judging from Taczanowski's description his Peruvian birds were *anatum* and not *cassini*, as are indeed two young ones collected by H. O. Forbes on the Chincha Islands. We cannot believe that the molting young female taken at Kwatta, Dutch Guiana, referred by the late Penard to *cassini*, really came from the Straits of Magellan. Its wholly black pileum and sides of head recall the southern race, but underneath it is just as pale ochraceous buff with comparatively narrow black streaking as the average from the United States and we prefer to regard it as a somewhat aberrant individual of the Duck Hawk inasmuch as the date (April 19) is altogether unlikely for a visitor from the South.

In this respect it might be well to call attention to the fact that a Duck Hawk banded in Wisconsin has been taken in Uruguay (cf. Cooke, Bd. Banding, **14**, p. 72, 1943).

Falco pealei Stejneger, Bull. U. S. Nat. Mus., **29**, p. 206, 1885—Bering Island (descr.; crit.).

Falco rudolfi Kleinschmidt, Falco, **5**, p. 19, 1909—Hakodate, Japan (type in coll. of O. Kleinschmidt).

Falco Peregrinus pealei Kleinschmidt, Berajah, 1927, p. 114 (crit.; range).

Range.—Breeds on islands in the Bering Sea, the Aleutian Islands and on both shores of the North Pacific, south to the Kurile Islands on the west and to the Queen Charlotte Islands on the east; in winter south to Oregon and Japan.

Field Museum Collection.—3: British Columbia (Queen Charlotte Islands, 2; Vancouver, 1).

Falco peregrinus calidus Latham. SIBERIAN PEREGRINE FALCON.

Falco calidus Latham, Ind. Orn., **1**, p. 41, 1790—India.

Falco peregrinus calidus Peters, Bds. World, **1**, p. 288, 1931 (range); Hanna, Condor, **42**, p. 166, 1940—Cape Prince of Wales, Alaska.

Range.—Western Siberia east to Kamchatka. In winter to India, New Guinea and northern Africa. One record for Alaska.

Falco peregrinus cassini Sharpe.[1] CASSIN'S FALCON.

Falco cassini Sharpe, Ann. Mag. Nat. Hist., (4), **11**, p. 221, 1873—Chile and Straits of Magellan (type from Straits of Magellan, in British Museum examined); idem, Cat. Bds. Brit. Mus., **1**, p. 384, 1874 (same localities); Gurney, Ibis, 1882, pp. 300, 301—Falkland Islands and Port Desire, Patagonia (crit.); Salvadori, Ann. Mus. Civ. Stor. Nat. Genova, (2), **20**, p. 614, 1900—Possession Bay, Magellan Straits (July 12); Dabbene, Anal. Mus. Nac. Buenos Aires, **8**, p. 356, 1902—Ushuaia, Tierra del Fuego (Feb.); idem, l.c., **18**, p. 250, 1910 (range in Argentina); Scott and Sharpe, Rep. Princet. Univ. Exped. Patag., **2**, Orn., p. 655, 1915—Coy Inlet, Santa Cruz (Oct. 19, Nov. 22).

[1] *Falco peregrinus cassini* Sharpe: Differs from *F. p. anatum*, when adult, by much more densely and broadly barred under parts; darker gray back with wider black bars; entirely black sides of the head without any whitish in auricular region; absence of white frontal band; and by the under parts being strongly washed with mouse-gray in the male sex, and much more cinnamomeous in the female. The juvenile plumage may be recognized by the much darker, tawny or Mikado brown instead of buff or ochraceous under parts with much heavier dark brown markings and various minor characters (cf. Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **19**, p. 282, 1932).

Cassin's Falcon breeds in the Falkland Islands and along the Straits of Magellan. The naturalists of the Princeton University Expedition report it as nesting on inaccessible cliffs on the coast of Santa Cruz, Patagonia. In winter, this Falcon rather irregularly visits southern and central Chile.

Material examined.—Falkland Islands: Port Stephens, 2; Port Stanley, 2; unspecified, 4.—Tierra del Fuego: Cape Penas, 1 (female adult, March 24); Estancia Viamonte, Rio Grande, 1 (female adult, April 7).—Straits of Magellan: Port Famine, 1 (the type); Elizabeth Island, 1.—Chile: Santiago, 1; Pelal, Temuco, Cautin, 1; unspecified, 2.

Falco peregrinus (not of Tunstall) King, Zool. Journ., **3**, p. 425, 1827—Port Famine, Magellan Straits; Philippi, Anal. Univ. Chile, **31**, p. 244, 1868—Chile (in part); Reed, l.c., **44**, p. 558, 1877—Chile (spec. in British Museum examined); Ridgway, Proc. U. S. Nat. Mus., **12**, "1889," p. 136, Feb., 1890—Elizabeth Island, Straits of Magellan (Jan. 20);[1] Bullock, Rev. Chil. Hist. Nat., **33**, p. 198, 1929—Angol, Malleco, Chile (July).

Falco peregrinus cassini Brooks, Bull. Mus. Comp. Zool., **61**, p. 158, 1917—Falkland Islands; Swann, Syn. List Accip., p. 124, 1920—Chile and Falkland Islands (chars.); idem, Syn. Accip., p. 200, 1922—"Andes from Ecuador south to" Chile and Falkland Islands; Wace, El Hornero, **2**, p. 203, 1921—Falkland Islands; Bennett, Ibis, 1926, p. 330—Falkland Islands (breeding); Peters, Bds. World, **1**, p. 290, 1931—Chile and Falkland Islands; Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **19**, p. 282, 1932—Chile (winter visitor) (chars.; range); Reynolds, El Hornero, **5**, p. 348, 1934—Isla de los Conejos, Tierra del Fuego; Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 482, 1936 (range in Argentina);[2] Swann, Monog. Bds. Prey, **2**, p. 389, 1936—"Ecuador to Chile, Tierra del Fuego, and Falkland Islands."

Falco Peregrinus cassini Kleinschmidt, Berajah, 1927, p. 116—Collico (April 16), Chile, and Falkland Islands (crit.).

Range.—Breeds in the Falkland Islands, in Tierra del Fuego and in southern Patagonia (Straits of Magellan; coast of Santa Cruz Territory); in winter irregular visitor to Chile (and probably the more northern parts of Argentina).[3]

*Falco deiroleucus Temminck.[4] ORANGE-BREASTED FALCON.

Falco deiroleucus Temminck, Nouv. Rec. Pl. Col., livr. 59, pl. 348, June 25, 1825—"dans l'île Saint Francois, partie méridionale du Brésil"=São Francisco Island, Santa Catharina, Brazil (type in Paris Museum examined); Léotaud, Ois. Trinidad, p. 17, 1866—Trinidad (descr.); Sclater

[1] This specimen, originally preserved in alcohol, is completely discolored. It is a fully adult bird in breeding plumage.

[2] Are the two birds from La Plata, Buenos Aires, really *F. p. cassini?* They were secured in December and January, viz., at a time when Cassin's Falcon is breeding on the Straits of Magellan!

[3] Here may belong *Falco Kreyenborgi* Kleinschmidt (Falco, **25**, p. 33, July, 1929) based upon a cage bird in the Zoo at Munster, Germany, which was said to have come from "Punto-Arenas in Chile."

[4] *Falco deiroleucus* Temminck is very much like *F. rufigularis* but differs, sex for sex, by much greater proportions, much larger bill, much stronger feet and toes, and certain details of coloration. The light markings on the breast are much wider and of a decidedly buffy to ochraceous tone, and those on under wing coverts, inner webs of primaries and tail-feathers are also more strongly pronounced, while there is always an extensive area of tawny on the chest. As has been emphasized by Stresemann, this beautiful falcon is clearly a tropical representative of the Duck Hawk, though we would not go so far as to call it a race of *F. peregrinus.*

Additional material examined.—Guatemala: Vera Paz, 2.—Nicaragua: Matagalpa, 1.—Costa Rica (unspecified), 1.—Panama: Bugaba, Chiriqui, 1.—Vene-

and Salvin, Proc. Zool. Soc. Lond., 1868, p. 629—San Esteban, Carabobo, Venezuela; Layard, Ibis, 1873, p. 394—Pará; Taczanowski, Proc. Zool. Soc. Lond., 1874, p. 550—Pampa Jesus, Junín, Peru; idem, Orn. Per., 1, p. 149, 1884—Paltaypampa and Tumbez, Peru; Berlepsch and Ihering, Zeits. Ges. Orn., 2, p. 171, 1885—Linha Peraja, Rio Grande do Sul; Riker and Chapman, Auk, 8, p. 161, 1891—Santarem, Brazil; Salvin and Godman, Biol. Centr.-Amer., Aves, 3, p. 117, pl. 66, 1901—Guatemala (Vera Paz), Nicaragua (Matagalpa), Costa Rica (La Palma) and Panama (Bugaba); Reiser, Denks. Math.-Nat. Kl. Akad. Wiss. Wien, 76, p. 91, 1910—Burity, Piauhy; Dabbene, Bol. Soc. Physis, 1, p. 304, 1914—Tucumán; Chubb, Bds. Brit. Guiana, 1, p. 278, 1916—Demerara River; Bangs and Noble, Auk, 35, p. 445, 1918—Perico, Rio Marañón, Peru; Swann, Syn. List Accip., p. 138, 1920 (chars.; range); idem, Auk, 38, p. 364, 1921—near Mérida, Venezuela; idem, Syn. Accip., p. 191, 1922 (range); Stresemann, Journ. Orn., 72, pp. 437, 438, 1927 (crit.); Miranda Ribeiro, Bol. Mus. Rio de Janeiro, 3, No. 2, p. 1, 1927—Taperinha, Pará; Hellmayr, Field Mus. Nat. Hist., Zool. Ser., 12, p. 455, 1929—Burity, near Parnagua, Piauhy, Brazil; Peters, Bds. World, 1, p. 291, 1931 (range); Griscom, Bull. Amer. Mus. N. H., 64, p. 164, 1932—Finca El Cipres, Guatemala; Belcher and Smooker, Ibis, 1934, p. 594—Trinidad; Griscom, Bull. Mus. Comp. Zool., 78, p. 302, 1935—Chiriqui and Veraguas; Swann, Monog. Bds. Prey, 2, p. 359, 1936 (monog.); Steullet and Deautier, Obr. Cinc. Mus. La Plata, 1, p. 483, 1936—Jujuy and Tucumán (bibliog.); Pinto, Rev. Mus. Paul., 22, p. 90, 1938—Cuyaba, Matto Grosso and Puerto Bertoni, Paraguay.

Hypotriorchis deiroleucus Salvin, Ibis, 1861, p. 354—Vera Paz, Guatemala; Pelzeln, Orn. Bras., 4, p. 397, 1870—São Francisco Island, Brazil; Lawrence, Ann. Lyc. Nat. Hist. N. Y., 9, p. 135, 1868—La Palma, Costa Rica; Frantzius, Journ. Orn., 17, p. 369, 1869—La Palma; Salvin, Proc. Zool. Soc. Lond., 1870, p. 215—Bugaba, Chiriqui; Cabanis, Journ. Orn., 22, p. 229, 1874—Cantagallo, Rio de Janeiro; Gurney, Ibis, 1882, p. 159 (nomencl.); Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., 26, No. 2, pp. 78, 96, 1912—Belem, Pará, Brazil.

Falco deiroleucos Schlegel, Mus. Pays-Bas, Falconer, p. 27 (note), 1862—Brazil.

Hypotriorchis rufigularis (errore) Sclater and Salvin, Proc. Zool. Soc. Lond., 1869, p. 252—San Esteban, Venezuela (spec. examined).

Falco auroentius (not of Gmelin)[1] Sharpe, Cat. Bds. Brit. Mus., 1, p. 402, 1874—Bahia and Demerara; Ihering, Ann. Est. Rio Grande do Sul, 16,

zuela: San Esteban near Puerto Cabello, 1; Savanna de Morosos (alt. 2,500 meters), Merida, 1.—British Guiana: Demerara River, 2.—Peru: Yahuarmayo (alt. 1,200 ft.), Sierra de Carabaya, 1.—Brazil: Buriti, near Parnagua, Piauhy, 1; Bahia, 2; Ilha São Francisco, Santa Catharina, 1; Lagõa dos Patos, Rio Grande do Sul, 1.

[1] In agreement with Gurney (Ibis, 1882, p. 159) we are unable to recognize the Orange-breasted Falcon in *Falco aurantius* Gmelin (Syst. Nat., 1, (1), p. 283, 1788—based on "orange-breasted Hobby" Latham, Gen. Syn. Bds., 1, (1), p. 105; Surinam). Neither the British Museum example nor that in the Leverian Collection which did not come to the Vienna Museum are any longer in existence. The description may have been based upon a female of what we now call *F. rufigularis rufigularis*.

p. 141, 1899—Mundo Novo; idem, Rev. Mus. Paul., 4, p. 163, 1900—Cantagallo, Rio de Janeiro; Lillo, Anal. Mus. Nac. Buenos Aires, 8, p. 205, 1902—Tucumán; idem, Rev. Letr. Cienc. Soc., 3, No. 13, p. 63, 1905—Tucumán; Ihering, Cat. Faun. Braz., 1, p. 99, 1907—Puerto Bertoni, Paraguay; Carriker, Ann. Carnegie Mus., 6, p. 470, 1910—La Palma, Costa Rica; Snethlage, Bol. Mus. Goeldi, 8, p. 142, 1914—Marajo, Brazil; Reiser, Denks. Math.-Nat. Kl. Akad. Wiss. Wien, 76, p. 208, 1923—Burity, Piauhy.

Hypotriorchis metanogyne Bertoni, Anal. Cient. Parag., ser. 1, No. 1, p. 168, Jan., 1901—Alto Parana (lat. 25° 40′), Paraguay (type in coll. of A. de W. Bertoni).

Hypotriorchis aurantius Berlepsch, Nov. Zool., 15, p. 494, 1908 (not yet recorded from Cayenne); Dabbene, Anal. Mus. Nac. Buenos Aires, 18, p. 249, 1910—Tucumán; Budin, El Hornero, 4, p. 407, 1931—Sierra del Zenta, Jujuy.

Falco (*Hypotriorchis*) *aurantius* Bertoni, Faun. Parag., p. 43, 1914—Alto Parana, Paraguay.

Range.—Locally distributed from southern Mexico (Tecolutla, Vera Cruz), through Guatemala (Vera Paz and Finca El Cipres), Nicaragua (Matagalpa), Costa Rica (La Palma) and Panama (Bugaba, Chiriqui, and Veraguas) to Venezuela (San Estéban, Carabobo; Mérida), Trinidad, British Guiana (Demerara River), Peru (Perico, Rio Marañón; Pampa Jesus, Junín; Yahuarmayo, Sierra de Carabaya, Dept. Puno), Brazil (Pindobal, Marajo; Pará; Santarem; Taperinha; Buriti, Piauhy; Bahia; Ilha São Francisco, Santa Catharina; Rio Grande do Sul; Cuyaba, Matto Grosso), northern Argentina (Sierra del Zenta, Jujuy; Tucumán), and Paraguay (Puerto Bertoni, Alto Parana; Orloff, Chaco).[1]

Field Museum Collection.—4: Brazil, Amazonas, Rio Purús (Canutama, 2; Labrea, 1); Paraguay (Orloff, Chaco, 1).

Falco rufigularis petoensis Chubb.[2] NORTHERN BAT-FALCON.

Falco rufigularis petoensis Chubb, Bull. Brit. Orn. Cl., 39, p. 22, Nov. 30, 1918—Peto, Yucatan, Mexico (type in British Museum examined); Swann, Syn. List Accip., p. 139, 1920—Yucatan.

[1] There are no definite records of this species from either Colombia or Ecuador. It is, however, possible that the nestling Peregrine Falcon from Ecuador mentioned by Hartert (Vog. Pal. Fauna, 2, p. 1049, 1913) might be referable to *F. deiroleucus*.

[2] *Falco rufigularis petoensis* Chubb: Very similar to the nominate race but separable in series by less blackish pileum, lighter plumbeous back and by having the throat, foreneck and nuchal collar less tinged with buffy or ochraceous.

Comparison of about sixty skins from Mexico and Central America with an adequate series from Guiana and Amazonia shows *petoensis* to be distinguishable, though not a strongly marked form. While certain Guianan specimens are by no means different in the coloration of the foreneck and collar, it is undeniable that a large proportion have these parts suffused with deep ochraceous to a degree

Hypotriorchis rufigularis (not *Falco rufigularis* Daudin) Cassin, Proc. Acad. Nat. Sci. Phila., **7**, p. 278 (note), 1855—Nuevo Leon, Mexico; Sclater, Proc. Zool. Soc. Lond., **23**, p. 134, 1855—Bogotá and Santa Marta, Colombia; idem, l.c., **27**, p. 390, 1859—Playa Vicente, Oaxaca, Mexico; Sclater and Salvin, Ibis, 1859, p. 219—Guatemala; Lawrence, Ann. Lyc. Nat. Hist. N. Y., **7**, p. 462, 1862—Panama Railroad; Salvin, Proc. Zool. Soc. Lond., 1867, p. 158—Santa Fe, Veraguas; idem, Ibis, 1869, p. 319—Costa Rica; idem, Proc. Zool. Soc. Lond., 1870, p. 215—Calovevora, Veraguas and Volcan de Chiriqui, Panama; Sclater and Salvin, l.c., p. 838—(San Pedro), Honduras; Grayson, Proc. Bost. Soc. N. H., **14**, p. 269, 1872—near Parnico, Sinaloa and "Tres Marias," Mexico; Lawrence, Mem. Bost. Soc. N. H., **2**, p. 301, 1874—Mazatlan, Sinaloa and Tres Marias Islands, Mexico; Sclater and Salvin, Proc. Zool. Soc. Lond., 1879, p. 541—Neche, Colombia; Boucard, l.c., 1883, p. 457—Yucatan; Berlepsch and Taczanowski, l.c., p. 574—Chimbo, Ecuador; Salvin, Ibis, 1889, p. 375—Ruatan Island, Honduras.

Hypotriorchis aurantius Lawrence, Ann. Lyc. Nat. Hist. N. Y., **9**, p. 207, 1869—Merida, Yucatan.

Falco albigularis (not of Daudin) Sharpe, Cat. Bds. Brit. Mus., **1**, p. 401, 1874—part, spec. i, k, Bay of Panama; Sumichrast, La Naturaleza, **5**, p. 237, 1881—Vera Cruz (Mirador, Orizaba) and Oaxaca (Santa Efigenia, Tehuantepec, Cacoprieto); Zeledon, Anal. Mus. Nac. Costa Rica, **1**, p. 125, 1887—La Palma de San José and Pozo Azul de Pirris, Costa Rica; Ridgway, Proc. U. S. Nat. Mus., **10**, pp. 583, 592, 1887—Trujillo and Segovia River, Honduras; Cherrie, Auk, **9**, p. 327, 1892—San José, Costa Rica; Richmond, Proc. U. S. Nat. Mus., **16**, p. 520, 1893—Escondido River, Nicaragua; idem, l.c., **18**, p. 628, 1896—Altamira, Tamaulipas; Hartert, Nov. Zool., **5**, p. 501, 1898—Paramba, Ecuador; Lantz, Trans. Kans. Acad. Sci., **16**, p. 219, 1899—Escuintla and Santo Tomas, Guatemala; Nelson, N. Amer. Fauna, **14**, p. 38, 1899—"Tres Marias Islands" (ex Grayson); Salvadori and Festa, Boll. Mus. Zool. Torino, **14**, No. 339, p. 11, 1899—Punta de Sabana, Darien; Goodfellow, Ibis, 1902, p. 222—Santo Domingo, Ecuador; Bangs, Proc. New Eng. Zool. Cl., **3**, p. 21, 1902—Boquete, Chiriqui; Cole, Bull. Mus. Comp. Zool., **50**, p. 122, 1906—Chichen Itza, Yucatan; Dearborn, Field Mus. Nat. Hist., Orn. Ser., **1**,

that is never the case in the range of *petoensis*. Birds from Neche, Antioquia, Colombia, and a single adult from Paramba, western Ecuador, are good average examples of the present form. Specimens from Sinaloa (Mazatlan) do not differ in the least from those of Yucatan and other parts of eastern Mexico, indicating the non-validity of *F. r. petrophilus*, based on a single(!) bird from Sonora. Moreover, the characters given for this alleged race are just those that serve to separate Central American birds from typical *rufigularis*.

Additional material examined.—Mexico: Presidio (near Mazatlan), Sinaloa, 4; Tampico, Tamaulipas, 1; Pava Pueva, Vera Cruz, 1; Jalapa, 4; Laguna Verde, Vera Cruz, 1; Rio San Martin, Vera Cruz, 1; Peto, Yucatan, 2; Tabi, Yucatan, 1; Tizimin, Yucatan, 1.—British Honduras: Belize, 1; Cayo, 2.—Honduras: San Pedro, 2; Ruatan Island, 1.—Guatemala: Choctum, 1; Chimuy, Vera Paz, 1; Rio Cahabon, 1; Escuintla, 1.—El Salvador: La Libertad, 1.—Nicaragua: Rio Escondido, 4; Matagalpa, 2; San Emilio, 1; Rio Coco, 1.—Costa Rica: Dota, 1; Irazu, 2.—Panama: Volcan de Chiriqui, 1; Calovevora, Veraguas, 1; Santa Fe, Veraguas, 1; Cordillera de Tole, Veraguas, 4; Bay of Panama, 2.—Colombia: Neche, Antioquia, 2.—Ecuador: Paramba, 1; Chimbo, 1.

p. 83, 1907—Patulul and Mazatenango, Guatemala; Carriker, Ann. Carnegie Mus., **6**, p. 469, 1910—Costa Rica (San Lucas de Data, Cerro de Santa Maria, El General de Terraba, Los Cuadros de Irazu, Guacimo, Cuabre de Talamanca, Miravalles, El Pozo de Terraba); Peters, Auk, **30**, p. 371, 1913—Xcopén and Camp Mengel, Quintana Roo; Stone, Proc. Acad. Nat. Sci. Phila., **70**, p. 250, 1918—Toro Point, Panama; Bangs and Barbour, Bull. Mus. Comp. Zool., **65**, p. 194, 1922—Jesusito, Darien; Lönnberg and Rendahl, Ark. Zool., **14**, No. 25, p. 42, 1922—Mindo, Ecuador; Griscom, Amer. Mus. Nov., **235**, p. 13, 1925—Acomal, Yucatan; Chapman, Bull. Amer. Mus. N. H., **55**, p. 240, 1926—Ecuador (Chimbo, Mindo); Darlington, Bull. Mus. Comp. Zool., **71**, p. 368, 1931—Rio Frio, Magdalena, Colombia; Griscom, l.c., **72**, p. 318, 1932—Perme and Obaldia, Panama; idem, Bull. Amer. Mus. N. H., **64**, p. 464, 1932—Guatemala (Hacienda California, Panajachel and Finca El Cipres); idem, Bull. Mus. Comp. Zool., **78**, p. 302, 1935—Panama; Carriker and de Schauensee, Proc. Acad. Nat. Sci. Phila., **87**, p. 416, 1935—Quirigua, Guatemala; Van Tyne, Misc. Pub., Mus. Zool. Univ. Mich., **27**, p. 18, 1935—Uaxactun, Peten, Guatemala; Sutton, Wilson Bull., **54**, col. pl. and note, p. 56, 1942—Rio Corona, San José de las Flores, Tamaulipas, Mexico.

Falco rufigularis Ridgway, in Baird, Brewer and Ridgway, Hist. N. Amer. Bds., **3**, p. 130, 1874—Mexico (descr.); Chapman, Bull. Amer. Mus. N. H., **8**, p. 286, 1896—Chichen Itza, Yucatan; Bangs, Proc. Biol. Soc. Wash., **13**, p. 92, 1899—La Concepción, Colombia; Allen, Bull. Amer. Mus. N. H., **13**, p. 131, 1900—Minca, Colombia; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 116, 1901—Mexico to Panama; Chapman, Bull. Amer. Mus. N. H., **36**, p. 250, 1917—part, La Manuelita, La Palma, La Candela, and Honda, Colombia.

Hypotriorchis albigularis Lawrence, Bull. U. S. Nat. Mus., **4**, p. 39, 1876—Tehuantepec (Tapana) and Oaxaca, Mexico.

Falco albigularis albigularis Swann, Syn. Accip., p. 191, 1922 (in part); Todd and Carriker, Ann. Carnegie Mus., **14**, p. 160, 1922—Bonda, Cincinnati, and Mamatoco, Santa Marta, Colombia; Peters, Bull. Mus. Comp. Zool., **69**, p. 418, 1929—Lancetilla, Honduras; idem, l.c., **71**, p. 309, 1931—Changuinola Canal, Almirante, Panama; idem, Bds. World, **1**, p. 291, 1931 (in part); Huber, Proc. Acad. Nat. Sci. Phila., **84**, p. 213, 1932—Eden, Nicaragua; Stone, l.c., p. 301, 1932—Lancetilla, Honduras; Bond, l.c., **88**, p. 356, 1936—Ruatan Island, Honduras; Swann, Monog. Bds. Prey, **2**, p. 360, 1936—part, Central America; Aldrich, Sci. Pub. Cleveland Mus. N. H., **7**, p. 51, 1937—Paracote, Azuero, Panama; Dickey and van Rossem, Field Mus. Nat. Hist., Zool. Ser., **23**, p. 137, 1938—El Salvador (Lake Olomega, Rio San Miguel, etc.) (crit.; habits); Traylor, l.c., **24**, p. 204, 1941—Mexico (Chichen Itza; Pacaitun).

Falco albigularis petoensis Swann, Syn. Accip., p. 192, 1922—Yucatan.

Falco rufigularis subsp. McLellan, Proc. Calif. Acad. Sci., (4), **16**, p. 21, 1927—San Blas, Nayarit (crit.).

Falco albigularis petrophilus van Rossem and Hachisuka, Proc. Biol. Soc. Wash., **50**, p. 107, Aug. 7, 1937—Guirocoba, Sonora (type in coll. of D. R. Dickey, University of California, Los Angeles); van Rossem, Occ. Pap.

Mus. Zool. Louisiana State Univ., **21**, p. 63, 1945—Guirocoba, Sonora (resident).

Range.—Mexico, from Sonora and Sinaloa on the Pacific coast[1] and from Tamaulipas (Altamira) on the Atlantic side south through Central America to Colombia (west of the eastern Andes) and western Ecuador.

Field Museum Collection.—17: Mexico (Sabinas, Tamaulipas, 1; Apatzingan, Michoacan, 1; Pacaitun, Campeche, 1; Chichen Itza, Yucatan, 3); Guatemala (Mazatenango, 2; Patulul, Solola, 1); El Salvador (Sitio del Nino, La Libertad, 1); Honduras (Ruatan, Bay Islands, 2); Panama (Port Obaldia, Darien, 2); Colombia, Cauca (Cauca Seca, 1; Munchique, 1); Ecuador (Montes del Achotal, Esmeraldas, 1).

***Falco rufigularis rufigularis** Daudin. GUIANAN BAT-FALCON.

Falco rufigularis Daudin,[2] Traite Elem. Comp. d'Orn., **2**, p. 131, 1800—based on "Orange-breasted Hobby" Latham, Gen. Syn. Bds., Suppl., p. 29 (second specimen), Cayenne; Riker and Chapman, Bull. Amer. Mus. N. H., **7**, p. 324, 1895—Caparo, Trinidad; Goeldi, Ibis, 1897, p. 155—Counany, northern Pará; idem, Ibis, 1903, p. 497—Capim River, Pará; Snethlage, Bol. Mus. Goeldi, **8**, p. 141, 1914—Pará, Peixe-Boi, Cunany, Rio Jamauchim (Maria Velha), Rio Purús (Bom Lugar), and Maranhão; Chubb, Bds. Brit. Guiana, **1**, p. 277, 1916 (many localities); Cherrie, Sci. Bull., Mus. Brookl. Inst., **2**, p. 348, 1916—near falls of Atures and Caicara, Rio Orinoco; Chapman, Bull. Amer. Mus. N. H., **36**, p. 250, 1917—part, Florencia, Caqueta, Colombia; Bangs and Penard, Bull. Mus. Comp. Zool., **62**, p. 40, 1918—Paramaribo, Surinam; Stone, Proc. Acad. Nat. Sci. Phila., **80**, p. 155, 1928—Pará; Young, Ibis, 1929, p. 14—coastland of British Guiana (nest and eggs descr.).

Falco thoracicus (Temminck MS.) Donovan, Naturalist's Repository, **2**, pl. 45, June, 1823—no locality given (type in coll. of E. Donovan).

Falco haemorrhoidalis Hahn, Vögel Asien, Amerika, etc., livr. 15, text to pl. 1, 1826[3]—Surinam (type in coll. of Bavarian Academy of Science, Munich).

Falco cucullatus Swainson, Anim. Menag., p. 340, Dec. 31, 1837—"Brazil, Trinidad, etc." (type in coll. of W. Swainson, now probably in University Museum, Cambridge, Eng.).

[1] Grayson's record from the "Tres Marias Islands" without further data is perhaps open to doubt.

[2] Latham's description of the second specimen is unmistakable, while what he says about the first example is altogether incomplete and ambiguous. We agree therefore with Gurney and Berlepsch that *Falco albigularis* Daudin (l.c., p. 131), based on this unsatisfactory diagnosis, had better be dropped in favor of the reliably established *F. rufigularis*.

[3] The plate itself bears the name "*F. aurantius* Lath.?"

Falco aurantius (not of Daudin?) Cabanis, in Schomburgk, Reisen Brit. Guiana, **3**, "1848," p. 753, 1849—British Guiana; Schlegel, Mus. Pays-Bas, Falcones, p. 24, 1862—Surinam; Léotaud, Ois. Trinidad, p. 20, 1866—Trinidad.

Hypotriorchis rufigularis Pelzeln, Verh. Zool. Bot. Ges. Wien, **13**, pp. 616, 632, 1863—part, Villa Bella de Matto Grosso, Rio Guapore, and Barra do Rio Negro (soft parts); idem, Orn. Bras., **1**, p. 5, 1867—part, same localities; Sclater and Salvin, Proc. Zool. Soc. Lond., 1867, p. 390—Rio Tocantins, Pará; Allen, Bull. Essex Inst., **8**, p. 82, 1876—Santarem; Gurney, Ibis, 1882, p. 159 (nomencl.); Taczanowski, Proc. Zool. Soc. Lond., 1882, p. 47—Huambo; Salvin, Ibis, 1886, p. 70—Bartica Grove, Camacusa, and Roraima, British Guiana; Berlepsch and Hartert, Nov. Zool., **9**, p. 115, 1902—Rio Catanapa, Puerto Samora (Rio Orinoco), and Suapure, Caura, Venezuela; Hellmayr, l.c., **14**, p. 39, 1907—Obidos, Brazil; Berlepsch, l.c., **15**, p. 294, 1908—Cayenne; Snethlage, Journ. Orn., **56**, p. 22, 1908—Canacury and Bom Lugar, Rio Purús; Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **26**, No. 2, pp. 78, 96, 1912—Pará and Rio Capim, Pará.

Falco albigularis (not of Daudin) Sharpe, Cat. Bds. Brit. Mus., **1**, p. 401, 1874—part, spec. d–t, Tocantins River, Pebas, British Guiana, Demerara and Trinidad; Salvadori and Festa, Boll. Mus. Zool. Torino, **15**, No. 368, p. 31, 1900—Gualaquiza and San José, Ecuador; Ihering, Rev. Mus. Paul., **6**, p. 450, 1905—Rio Juruá, Brazil; idem, Cat. Faun. Braz., **1**, p. 99, 1907—part, Rio Juruá.

Falco albogularis Robinson and Richmond, Proc. U. S. Nat. Mus., **24**, p. 169, 1901—San Julian, north coast of Venezuela.

Falco rufigularis pax Chubb, Bull. Brit. Orn. Cl., **39**, p. 22, Nov. 30, 1918—Charuplaya, Dept. La Paz, Bolivia (type in British Museum examined); idem, Ibis, 1919, p. 289—Charuplaya; Swann, Syn. List Accip., p. 139, 1920—Bolivia.

Falco rufigularis rufigularis Swann, Syn. List Accip., p. 138, 1920 (in part).

Falco albigularis albigularis Swann, Syn. Accip., p. 191, 1922 (in part); Peters, Bds. World, **1**, p. 291, 1931 (in part); Belcher and Smooker, Ibis, 1934, p. 594—Trinidad (nest and eggs descr.); Swann, Monog. Bds. Prey, **2**, p. 360, 1936 (in part); Pinto, Rev. Mus. Paul., **23**, p. 91, 1938—part, Rio Juruá and Manacapuru, Amazonas.

Range.—Island of Trinidad, the Guianas and Amazonia from the Pará district (possibly even from northern Maranhão) west through Venezuela (Zulia; Colon) and Brazil to the eastern base of the Andes in Colombia (Caqueta region), Ecuador and Peru (Huambo; Pebas), and south to northern Bolivia (Charuplaya, Dept. La Paz) and western Matto Grosso (Rio Guapore).[1]

[1] Birds from Brazilian Amazonia agree well with a Guianan series. Two from eastern Ecuador and the Caqueta region of Colombia are similar. An adult female from northern Matto Grosso (Barra do Galera, Rio Guapore) and another from Peru (Pebas) are likewise typical of the present form. The type of *F. r. pax* from northern Bolivia (Charuplaya, Dept. La Paz) proves to be indistinguish-

Field Museum Collection.—30: Colombia (Mitu, Rio Vaupes, 1); Venezuela (Encontrados, Zulia, 2; Colon, Tachira, 1); British Guiana (Mahaica River, 2; Coverden, 2); Brazil (Itacoatiara, 3; Lago do Baptista, 4; Igarape Aniba, 3; Canutama, Rio Purús, 4; Labrea, Rio Purús, 3; Monte Alegre, Pará, 1; Piquiatuba, Pará, 2; Obidos, Pará, 1); Peru (Chanchamayo, Junín, 1).

***Falco rufigularis ophryophanes** (Salvadori).[1] BUFF-BROWED BAT FALCON.

Hypotriorchis ophryophanes Salvadori, Boll. Mus. Zool. Torino, **10**, No. 208, p. 20, 1895—Colonia Risso, Rio Apa, Paraguay (type in Turin Museum); Bertoni, Faun. Parag., p. 43, 1914—Paraguay.

Hypotriorchis rufigularis (not *Falco rufigularis* Daudin) Pelzeln, Verh. Zool.-Bot. Gesells. Wien, **13**, pp. 616, 632, 1863—part, Rio de Janeiro (Sapitiba), São Paulo (Porto do Rio Parana), Goyaz (Guardamor), and Matto Grosso (Caicara, Rio Paraguay) (soft parts); idem, Orn. Bras., **1**, p. 5, 1867—part, same localities; Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 249, 1910 (range in Argentina); Ménégaux, Rev. Franç. d'Orn., 1918, p. 290—Villa Lutetia, near San Ignacio, Misiones.

Falco rufigularis (not of Daudin) Reinhardt, Vidensk. Medd. Naturhist. Foren., 1870, p. 70—Lagõa Santa, Minas Geraes; Allen, Bull. Amer. Mus. N. H., **5**, p. 147, 1893—Chapada, Matto Grosso, and Piedra Blanca, Bolivia; Ménégaux, Rev. Franç. d'Orn., 1917, p. 37—Pocone, Matto Grosso; Sztolcman, Ann. Zool. Mus. Pol. Hist. Nat., **5**, p. 124, 1926—Candido de Abreu and Salto de Uba, Parana.

Falco albigularis (not of Daudin) Sharpe, Cat. Bds. Brit. Mus., **1**, p. 401, 1874—part, spec. c, Brazil, Rio de Janeiro (spec. examined); Kerr, Ibis,

able from average Guianan specimens by the color of the upper parts or breast (the latter being just as black, narrowly barred with white) or any other character. It is certainly distinct from the population of eastern Bolivia (Santa Cruz and Tarija), lacking every trace of buff about the face and of white on alula, and tends to show that the range of typical *rufigularis* extends south to the Amazonian slope of the Bolivian Andes, whereas another form is met with in the plains of eastern Bolivia.

Additional material examined.—French Guiana: Cayenne, 1.—British Guiana (various localities), 30.—Venezuela: Caura Valley, 3.—Colombia: Cuembi, Rio Putumayo, Caqueta, 2.—Eastern Ecuador: San José, 2.—Peru: Pebas, 1.—Brazil: Manáos, 1; Obidos, 3; Rio Tocantins, 1; Pará, 3; Barro do Galera, Rio Guapore, Matto Grosso, 1.—Bolivia: Charuplaya (alt. 1300 meters), Dept. La Paz, 1.

[1] *Falco rufigularis ophryophanes* (Salvadori): Nearest to the nominate race, but loral region and a more or less developed superciliary streak buffy to bright ochraceous; outer web of external alula feathers spotted or edged with white; white barring of breast generally more regularly and evenly distributed. Wing, 185–195, (female) 208–218; tail, 98–102, (female), 105–120.

A series of nearly twenty specimens not only substantiates the characters claimed by the describer, but shows this form to be distributed all over the table-land of Brazil and the adjacent parts of Paraguay, Bolivia, and Argentina, where it replaces the Amazonian *F. r. rufigularis*. The buffy superciliary streak is variable in intensity as well as in extent, irrespective of locality. The greatest development

1892, p. 142—Fortin Page, lower Pilcomayo; Ihering, Rev. Mus. Paul., 3, p. 366, 1899—São Paulo; Lillo, Rev. Letr. Cienc. Soc., 3, No. 13, p. 295, 1905—Rio Sali, Tucumán; Ihering, Cat. Faun. Braz., 1, p. 99, 1907—part, São Paulo (Franca, Avanhandava, Iguape); Reiser, Denks. Math.-Naturw. Kl. Akad. Wiss. Wien, 76, p. 91, 1910—Piauhy (Riacho Fresco, Pedrinha, Piranha); Lima, Rev. Mus. Paul., 12, (2), p. 96, 1920—Bahia; Reiser, Denks. Math.-Naturw. Kl. Akad. Wiss. Wien, p. 208, 1923—Piauhy (habits).

Hypotriorchis albigularis Lilla, Anal. Mus. Nac. Buenos Aires, 8, p. 205, 1902—Rio Sale, Tucumán.

Falco (*Hypotriorchis*) *rufigularis* Bertoni, Faun. Parag., p. 43, 1914—Alto Parana, Paraguay.

Falco rufigularis rufigularis Swann, Syn. List Accip., p. 138, 1920—part, Argentina; Hellmayr, Field Mus. Nat. Hist., Zool. Ser., 12, p. 455, 1929—Ibiapaba, Piauhy and Philadelphia, lower Tocantins, Goyaz; Naumburg, Bull. Amer. Mus. N. H., 60, p. 114, 1930—Matto Grosso (in part).

Falco albigularis pax (not of Chubb) Swann, Syn. Accip., p. 192, 1922—southeastern Bolivia and Argentina; Peters, Bds. World, 1, p. 291, 1931 (range); Swann, Monog. Bds. Prey, 2, p. 361, 1936—Bolivia to Formosa and Matto Grosso (monog.); Steullet and Deautier, Obr. Cinc. Mus. La Plata, 1, p. 484, 1936 (range in Argentina).

Falco rufigularis pax Laubmann, Wiss. Erg. Deuts. Gran Chaco Exp., Vogel, p. 97, 1930—Formosa (Mission Tacaagle, Yunca Viejo) and Bolivia (Villa Montes, Tarija; Monte Grande, Guarayos, Santa Cruz) (crit.).

Falco albigularis albigularis Pinto, Rev. Mus. Paul., 23, p. 91, 1938—part, Bahia (Barra do Rio Grande; Belmonte), Minas Geraes (Pirapora), São Paulo (Iguapé, Bauru, Franca, Avanhandava), and Matto Grosso (Corumba).

Range.—Tableland of Brazil, from Piauhy and adjoining parts of Goyaz (Philadelphia, lower Tocantins) south through Bahia, Minas Geraes, Rio de Janeiro, and São Paulo to Parana and west to Matto Grosso; eastern Bolivia; Paraguay and the northern parts of Argentina, from Jujuy to Formosa and the Chaco; also in Misiones.

of this feature is exhibited by a male from Piauhy (Pedrinha) and a female from Jujuy (Ledesma) in both of which the entire loral region and a conspicuous supercilium (produced to above the middle of the eye) are bright ochraceous. On the opposite end stands a female from the Rio Pilcomayo, a male from Piauhy (Piranha), and a couple from Rio de Janeiro, in which these markings are merely suggested. The remaining specimens are variously intermediate. The white spotting along the outer web of the alula, though also subject to variation, is at least indicated by traces. The color of throat and foreneck ranges from a delicate buffy white (female from Villa Rica) to deep ochraceous (female from Guardamor; male from Rio de Janeiro).

Additional material examined.—Brazil: Pedrinha, Piauhy, 2; Piranha, Piauhy, 1; Riacho Fresco, Piauhy, 1; Guardamor, Goyaz, 1; Rio de Janeiro, 3.—Bolivia: Piedra Branca, 1; Villa Montes, Tarija, 1.—Paraguay: Villa Rica, 2; Fortin Page, lower Pilcomayo, 1.—Argentina: Ledesma, Jujuy, 1; Mission Tacaagle, 2; Villa Lutetia, Misiones, 1.

Field Museum Collection.—4: Brazil (Ibiapaba, Piauhy, 1; Philadelphia, Goyaz, 1); Bolivia (Buena Vista, Santa Cruz, 1); Paraguay (Rosario, 1).

***Falco fusco-caerulescens septentrionalis** Todd.[1] NORTHERN APLOMADO FALCON.

Falco fusco-caerulescens[2] *septentrionalis* Todd, Proc. Biol. Soc. Wash., **29**, p. 98, June 6, 1916—Fort Huachuca, Arizona (type in U. S. National Museum); Swann, Syn. List Accip., p. 139, 1920—Arizona; Peters, Bds. World, **1**, p. 294, 1931 (range); Griscom, Bull. Amer. Mus. N. H., **64**, p. 164, 1932—Guatemala; Bent, Bull. U. S. Nat. Mus., **170**, p. 96, 1938 (life hist.).

Hypotriorchis Aurantius (not *Falco aurantius* Gmelin) Heermann, Proc. Acad. Nat. Sci. Phila., **7**, p. 177, 1855—New Mexico.

Hypotriorchis femoralis (not *Falco femoralis* Temminck) Cassin, Proc. Acad. Nat. Sci. Phila., **7**, p. 278, 1855—New Mexico; Sclater, Proc. Zool. Soc. Lond., **24**, p. 285, 1856—Vera Cruz, Mexico; idem, l.c., **27**, p. 368, 1859—vicinity of Jalapa, Vera Cruz; Sclater and Salvin, Ibis, 1859, p. 219—Guatemala; Lawrence, Mem. Bost. Soc. N. H., **2**, p. 301, 1874—Mazatlan, Sinaloa, and San Blas, Nayarit; idem, Bull. U. S. Nat. Mus., **4**, p. 39, 1876—Tehuantepec City, Mexico; (?)Boucard, Proc. Zool. Soc. Lond., 1883, p. 457—Yucatan (Cabot collection).

Falco (*Hypotriorchis*) *femoralis* Coues, Proc. Acad. Nat. Sci. Phila., 1866, p. 43—southern Arizona.

Falco femoralis Sumichrast, Mem. Bost. Soc. N. H., p. 560, 1869—hot region of Vera Cruz; Finsch, Abhandl. Naturw. Ver. Bremen, **2**, p. 362, 1871—Mazatlan, Sinaloa.

Falco fusco-caerulescens (not of Vieillot) Sharpe, Cat. Bds. Brit. Mus., **1**, p. 400, 1874—part, Mexico; Merrill, Proc. U. S. Nat. Mus., **1**, p. 154, 1878—Fort Brown, Texas (nest and eggs descr.); Sumichrast, La Naturaleza, **5**, p. 237, 1881—Omealco, Vera Cruz and Tehuantepec City, Oaxaca; Bendire, Life Hist. N. Amer. Bds., **1**, p. 306, 1892—Fort Huachuca, Arizona (nest and eggs descr.); Richmond, Proc. U. S. Nat. Mus., **18**, p. 628, 1896—Altamira, Tamaulipas; Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 118, 1901—Mexico (Altamira, Mazatlan, San Blas, Omealco, Tehuantepec City, Vera Cruz, Jalapa, Yucatan) and Guate-

[1] *Falco fusco-caerulescens septentrionalis* Todd differs from the South American races by its light grayish upper parts (this being especially noticeable on the crown), extensive and solid black pectoral zone, and the light tone of the zinc-orange abdominal area.

That this bird also breeds in Mexico is strongly suggested by an adult male in the British Museum taken at San Blas, Nayarit, on August 5.

Additional material examined.—Texas: Brownsville, 2; Corpus Christi, 1; Cameron County, 2.—Mexico: Presidio de Mazatlan, Sinaloa, 1; San Blas, Nayarit, 1.—Guatemala: Chimay, Vera Cruz, 1.

[2] Spelled *fusco-coerulescens* by Todd. We have not segregated the references in which *caerulescens* is spelled *coerulescens*, as the origin of this deviation is often obscure.

mala (San Augustin); Swarth, Pacif. Coast Avif., **4**, p. 8, 1904—Huachuca Mountains, Arizona; Phillips, Auk, **28**, p. 73, 1911—Canon Guiaves, Altamira and Matamoros, Tamaulipas; Swarth, Pacif. Coast Avif., **10**, p. 28, 1914—southeastern Arizona; Griscom and Crosby, Auk, **42**, p. 536, 1925—lower Rio Grande Valley, Texas; Friedmann, l.c., p. 545, 1925—Brownsville, Texas; Van Tyne and Sutton, Misc. Pub., Mus. Zool. Univ. Mich., **37**, p. 25, 1937—Brewster County, Texas.

Falco (Rhynchofalco) femoralis Baird, Brewer and Ridgway, Hist. N. Amer. Bds., **3**, p. 155, 1874—part, Mexico (Mirador, Vera Cruz, and Mazatlan, Sinaloa).

Rhynchofalco fusco-caerulescens septentrionalis Swann, Syn. Accip., p. 211, 1922—part, Mexico, Arizona and Texas; idem, Monog. Bds. Prey, **2**, p. 426, 1936 (monog.).

Range.—Southeastern Arizona, New Mexico and southern Texas, south in the lowland districts of Mexico to Vera Cruz, Nayarit and Oaxaca; on migration sparingly to Guatemala (Chimay, Vera Cruz) and Nicaragua (San Gerónimo).

Field Museum Collection.—11: Texas (Brownsville, 6); Mexico, Tamaulipas (Santa Engracia, 1; Tampico, 2); Nicaragua (San Geronimo, Chinandega, 2).[1]

***Falco fusco-caerulescens pichinchae** Chapman.[2] ANDEAN APLOMADO FALCON.

Falco fusco-caerulescens pichinchae Chapman, Amer. Mus. Nov., **205**, p. 1, Dec. 28, 1925—Crater of Pichincha, Ecuador (type in the American Museum of Natural History, New York); idem, Bull. Amer. Mus. N. H., **55**, p. 239, 1926—Antisana, Pichincha and Iliniza, Ecuador; Peters, Bds. World, **1**, p. 294, 1931—Ecuador to Peru (La Raya).

[1] Male, wing 248; female, wing 279 mm. (both immatures).

[2] *Falco fusco-caerulescens pichinchae* Chapman: Agreeing in size with *F. f. septentrionalis*, but considerably darker throughout, upper parts duskier, the pileum especially so; the ochraceous abdominal area deeper in tone; the black pectoral zone less extensive and more or less broken medially. Compared to the nominate race, *pichinchae* is larger, generally darker above and more deeply ochraceous-tawny on the abdomen.

Study of a considerable series shows that not only birds from the highlands of Peru and Bolivia, but also those from Chile are referable to this richly colored race. Specimens from central Chile are to all intent identical with the Ecuadorian ones, except that, even in fully adult plumage, they have the chest streaked with blackish, which obtains in only two from Ecuador. A single adult female from Vilugo, Tarapaca, is ultratypical of *pichinchae*, as far as the lower parts are concerned, but it is remarkably gray above, even lighter than *septentrionalis*.

Additional material examined.—Ecuador: Pichincha, 1; hills of Carapungo, near Quito, 1; near Chaupicruz, near Quito, 2; Colta, Riobamba, 1; Yanayacu, 1.—Peru: Chosica, 1; Junín, 3; Cabo Blanco, 1; Arequipa, 1; Ccachupata, Cuzco, 1.—Bolivia: Ollagua, Dept. Oruro, 1.—Chile: Vilugo, Tarapaca, 1; Prov. Santiago, 5; Paine, O'Higgins, 1.

Falco femoralis (not of Temminck) Fraser, Proc. Zool. Soc. Lond., **11**, p. 109, 1843—Chile (habits); Tschudi, Faun. Peru., Orn., p. 108, 1846—wooded region and sierras of Peru; Philippi, Anal. Univ. Chile, **31**, p. 244, 1868—Santiago and the whole of Chile; Sclater and Salvin, Proc. Zool. Soc. Lond., 1874, p. 678—Paucartambo, Dept. Cuzco, Peru.

Harpagus bidentatus (errore) Des Murs, in Gay, Hist. Fis. Pol. Chile, Zool., **1**, p. 230, 1847—Chile (habits).

Hypotriorchis femoralis Cassin, in Gilliss, U. S. Ast. Exp., **2**, p. 177, 1855—Chile; Pelzeln, Verh. Zool. Bot. Ges. Wien, **13**, p. 616, 1863—part, Peru (crit.); idem, Reise Nov., Zool., **1**, Vögel, p. 8, 1865—Chile; Sclater, Proc. Zool. Soc. Lond., 1867, pp. 330, 338—Chile; idem and Salvin, l.c., p. 988—Arequipa, Peru; iidem, l.c., 1868, p. 569—Arequipa; iidem, l.c., 1869, p. 155—Tinta, Dept. Cuzco, Peru; Taczanowski, Orn. Per., **1**, p. 151, 1884—Peru.

Aesalon femoralis Taczanowski, Proc. Zool. Soc. Lond., 1874, p. 550—Junín and Maraynioc, Peru.

Falco fusco-caerulescens (not of Vieillot) Sharpe, Cat. Bds. Brit. Mus., **1**, p. 400, 1874—part, spec. c, d, Peru (Ccachupata, Arequipa); Sclater, Proc. Zool. Soc. Lond., 1891, p. 135—Vilugo, Tarapaca, Chile; Reed, Anal. Univ. Chile, **93**, p. 206, 1896—Chile; Lane, Ibis, 1897, p. 180—Vilugo, Tarapaca; Albert, Anal. Univ. Chile, **108**, p. 287, 1901—Chile (descr.; habits); Goodfellow, Ibis, 1902, p. 222—Antisana, Ecuador; Lillo, Anal. Mus. Nac. Buenos Aires, **8**, p. 205, 1902—Tucumán; Lönnberg, Ibis, 1903, p. 147—Moreno, Jujuy; Lillo, Rev. Letr. Cienc. Soc., **3**, No. 13, p. 63, 1905—Tucumán; Hartert and Venturi, Nov. Zool., **16**, p. 240, 1909—part, Tucumán; Chubb, Ibis, 1919, p. 289—Ecuador (Cetta, Riobamba), Peru (Chosica), and Bolivia ("Aullagas"=Ollagua, Oruro); Chapman, Bull. U. S. Nat. Mus., **117**, p. 60, 1921—La Raya, Peru; Lönnberg and Rendahl, Ark. Zool., **14**, No. 25, p. 42, 1922—Carapungo, Chaupicruz, and Zambiza, Ecuador; Barros, Rev. Chil. Hist. Nat., **33**, p. 358, 1929—Cordillera of Aconcagua, Chile.

Hypotriorchis fusco-caerulescens Berlepsch and Stolzmann, Proc. Zool. Soc. Lond., 1902, (2), p. 43—Ingapirca, Peru; iidem, Ornis, **13**, p. 130, 1906—Pichacani, Puno, Peru; Barros, Rev. Chil. Hist. Nat., **24**, p. 48, 1920—Nilahue, Curico, Chile; Housse, l.c., **29**, p. 226, 1925—Isla La Mocha, Arauco, Chile; Jaffuel and Pirion, l.c., **31**, p. 104, 1927—Marga-Marga Valley, Valparaiso, Chile.

Falco fusco-caerulescens fusco-caerulescens Wetmore, Bull. U. S. Nat. Mus., **133**, p. 103, 1926—part, Tucumán (Tapia and Sierra San Xavier); Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **19**, p. 283, 1932—Banos del Toro, Coquimbo, Chile; Bullock, Rev. Chil. Hist. Nat., **39**, p. 241, 1935—Isla La Mocha, Chile (ex Housse); Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 485, 1936—part, Tapia, Tucumán.

Rhynchofalco fusco-caerulescens pichinchae Swann, Monog. Bds. Prey, **2**, p. 427, 1936—Ecuador and Peru (monog.).

Falco femoralis pichinchae Peters and Griswold, Bull. Mus. Comp. Zool., **92**, p. 292, 1943—Maraynioc, Peru (variations and races).

Range.—Temperate zone of southwestern Colombia (Munchique), Ecuador, Peru, western Bolivia (La Paz, Cochabamba, Oruro), south to Chile (Curico; one sight record from Isla La Mocha, off Arauco) and northwestern Argentina (Tucumán).

Field Museum Collection.—13: Colombia (Munchique, Cauca, 1); Ecuador (Cerro Chimborazo, 2; Yana Urcu, Azuay, 1); Peru (Macate, Ancachs, 1; Puno, Puno, 1; Yua, Arequipa, 1); Bolivia (Pacajes, La Paz, 1; Cuchicancha, Cochabamba, 2); Chile (Banos del Toro, Coquimbo, 1; Batuco, Santiago, 1); Argentina (Aconquija, Tucumán, 1).

***Falco fusco-caerulescens fusco-caerulescens** Vieillot.[1] APLOMADO FALCON.

Falco fusco-caerulescens Vieillot, Nouv. Dict. Hist. Nat., nouv. éd., **11**, p. 90, June 21, 1817—based on "Alconcillo obscuro azulejo" Azara, No. 40, (descr. imm.), Paraguay; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 400, 1874—part, spec. b, e, f, Patagonia and Brazil (Mexiana Island); Sclater and Hudson, Arg. Orn., **2**, p. 69, 1889—Argentina (habits); Frenzel, Journ. Orn., **39**, p. 114, 1891—Cordoba; Holland, Ibis, 1893, p. 488—Santa Elena, Buenos Aires (March to August); Allen, Bull. Amer. Mus. N. H., **5**, p. 147, 1893—Chapada, Matto Grosso; Chapman, l.c., **6**, p. 71, 1894—Trinidad; Koslowsky, Rev. Mus. La Plata, **6**, p. 285, 1895—Chilecito, La Rioja; Salvadori, Boll. Mus. Zool. Torino, **12**, No. 292, p. 30, 1897—Caiza, Bolivia and Tala, Salta; Ihering, Rev. Mus. Paul., **3**, p. 365, 1899—São Paulo; (?)Arribalzaga, Anal. Mus. Nac. Buenos Aires, **8**, p. 161, 1902—Lago General Paz, Chubut; Bruch, Rev. Mus. La Plata, **11**, p. 251, 1904—Lerma, Salta; Crawshay, Bds. Tierra del Fuego, p. 17, 1907—Cheena Creek Settlement, Tierra del Fuego; Hagmann, Zool. Jahrb. (Syst.), **26**, p. 23, 1907—Mexiana Island, Brazil; Hartert and Venturi, Nov. Zool., **16**, p. 240, 1909—part, Mocovi (Santa Fe); Reiser, Denks. Math.-Naturw. Kl. Akad. Wiss. Wien, **76**, p. 91, 1910—Bahia (Joazeiro; Petrotina, Rio São Francisco; Fazenda da Serra, Rio Grange) and Piauhy (Burity, near Parnagua); Grant, Ibis, 1911, p. 332—Ajo, Buenos Aires (June 27); Snethlage, Bol. Mus. Goeldi, **8**, p. 141, 1914—Marajo (Dunas, Pacoval and Mexiana), Brazil; (?)Scott and Sharpe, Rep. Princet. Univ. Exped. Patag., **2**, Orn., p. 661, 1915—Rio Chico de Santa Cruz (March) near Coy Inlet (Nov. 21), and Pacific Divide, Cordillera Patagonia (March 17); Chubb, Bds. Brit. Guiana, **1**, p. 276, 1916—Roraima, Upper Takutu Mountains and Pirara; Cherrie, Sci. Bull., Mus. Brookl. Inst., **2**, p. 347, 1916—Caicara, Orinoco, Venezuela (soft parts); Chapman, Bull. Amer. Mus. N. H., **36**, p. 250, 1917—Cali, Cauca, Colombia; Gibson, Ibis,

[1] Peters and Griswold (Bull. Mus. Comp. Zool., **92**, p. 294, 1943) claim that the name *Falco fusco-caerulescens* Vieillot (Nouv. Dict. Hist. Nat., **11**, p. 90, 1817—Paraguay) does not apply to this species but to *Falco albigularis* Daudin, 1802, and that therefore *Falco femoralis* Temminck (Pl. Col., livr. 21, pl. 121, 1822; livr. 58, pl. 343, 1825—Brazil, ex Natterer) must be used for the Aplomado Falcon.—B.C.

1919, p. 510—Cape San Antonio, Buenos Aires (Aug. 23, June 27 and 28); Daguerre, El Hornero, **2**, p. 266, 1922—Las Rosas, Buenos Aires; Giacomelli, l.c., **3**, p. 78, 1923—La Rioja; Pereyra, l.c., p. 165, 1923—Zelaya, Buenos Aires; Marelli, Mem. Minist. Obr. Publ. for 1922–23, p. 631, 1924—Prov. Buenos Aires; Wilson, El Hornero, **3**, p. 356, 1926—Venado Tuerto, Santa Fe; Young, Ibis, 1929, p. 14—Blairmont, British Guiana.

Falco femoralis Temminck, Nouv. Rec. Pl. Col., livr. 21, pl. 121 (immature), April, 1822—Brazil (type in Leyden Museum); idem, l.c., livr. 58, pl. 343 (=adult), May 28, 1825—Brazil; d'Orbigny, Voy. Amér. Mérid., Ois., p. 116, 1836—Buenos Aires, Corrientes and Bolivia (Moxos, Chiquitos, Chuquisaca); (?)Darwin, Zool. Beagle, **3**, Birds, p. 28, 1839—Port Desire, Santa Cruz, Patagonia (breeding); Burmeister, Syst. Uebers. Th. Bras., **2**, (1), p. 96, 1855—Brazil; idem, Journ. Orn., **8**, p. 242, 1860—Rio Cuarto, Argentina; idem, Reise La Plata St., **2**, p. 437, 1861—Rio Cuarto; Schlegel, Mus. Pays-Bas, Falcones, p. 20, 1862—Brazil; Reinhardt, Vidensk. Medd. Naturhist. Foren., 1870, p. 70—Lagõa Santa, Minas Geraes and São Bento de Araraquara, São Paulo, Brazil; Doering, Period. Zool., **1**, p. 247, 1874—Barrancas, Rio Guayquiraro, Corrientes; (?)Burmeister, Anal. Mus. Nac. Buenos Aires, **3**, p. 316, 1888—Fortin Villegas, Patagonia.

Falco cyanescens Vieillot, Tabl. Enc. Meth. Orn., livr. 93, p. 1234, 1823—based on "Alconcillo obscuro azuelejo" Azara, No. 40, Paraguay.

Falco thoracius "Illiger" (not of Donovan, June, 1823) Lichtenstein, Verz. Doubl. Berl. Mus., p. 62, after Sept., 1823—based on "Alconcillo aplomado" Azara, No. 39 (=adult), Paraguay.

Hypotriorchis femoralis Cabanis, in Schomburgk, Reisen Brit. Guiana, **3**, "1848," p. 734, 1849—Pirara; Cassin, Proc. Acad. Nat. Sci. Phila., 1860, p. 132—Cartagena, Colombia; Pelzeln, Verh. Zool. Bot. Ges. Wien, **13**, pp. 616, 633, 1863—part, Brazil (soft parts); Léotaud, Ois. Trinidad, p. 24, 1866—Trinidad; Pelzeln, Orn. Bras., **1**, p. 7, 1867—Rio de Janeiro (Sapitiba), São Paulo (Mattodentro, Ypanema), Parana (Registo Velho), Matto Grosso (Caicara) and Amazonas (Forte do Rio Branco), Brazil; Sclater and Salvin, Proc. Zool. Soc. Lond., 1867, p. 590—Mexiana Island, Brazil; iidem, l.c., 1868, p. 143—Conchitas, Buenos Aires; iidem, l.c., 1869, p. 252—Lake of Valencia, Venezuela; Sclater and Hudson, l.c., 1872, p. 536—Rio Negro; Lee, Ibis, 1873, pp. 131, 135—Cordoba (between Frayle and Saladillo) and Entre Rios (mouth of the Rio Gato, near Gualeguaychu); Durnford, l.c., 1877, p. 187—Buenos Aires (winter visitor); idem, l.c., 1878, p. 398—Chubut Valley (breeding); Gibson, l.c., 1879, p. 412—Cape San Antonio, Buenos Aires (one spec.); Salvin, l.c., 1880, p. 362—Salta; Doering, in Roca, Inf. Ofic. Exp. Rio Negro, Zool., p. 51, 1881—Rio Negro and Rio Colorado; White, Proc. Zool. Soc. Lond., 1883, p. 41—Cosquin, Cordoba; Berlepsch, Ibis, 1884, p. 437—Angostura, Orinoco, Venezuela; Salvin, Ibis, 1886, p. 470—Lomas de Zamora, Buenos Aires.

Falco (*Rhynchofalco*) *femoralis* Baird, Brewer and Ridgway, Hist. N. Amer. Bds., **3**, p. 155, 1874—part, Buenos Aires (Conchitas) and Paraguay.

Hypotriorchis fusco-caerulescens Stempelmann and Schaby, Bol. Acad. Nac. Cienc. Cordoba, **10**, p. 396, 1890—Cordoba; Berlepsch and Hartert, Nov. Zool., **9**, p. 115, 1902—Altagracia, Caicara, and Ciudad Bolivar, Orinoco, Venezuela; Ihering, Cat. Faun. Braz., **1**, p. 98, 1907—São Paulo (Ypiranga,

Avanhandava) and Rio Grande do Sul (Novo Hamburgo); Berlepsch, Nov. Zool., **15**, p. 294, 1908—Guianas; Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 249, 1910 (range in Argentina); Hellmayr, Abhandl. Math.-phys. Kl. Bayr. Akad. Wiss., **26**, No. 2, p. 121, 1912—Mexiana, Brazil; Reed, Aves Prov. Mendoza, p. 22, 1916—San Carlos, Mendoza; Ménégaux, Rev. Franç. d'Orn., 1918, p. 290—Villa Lutetia (near San Ignacio), Misiones; idem, l.c., 1925, p. 285—Lagunas de Canitas, near Icano, Santiago del Estero.

Falco (*Hypotriorchis*) *fusco-caerulescens* Bertoni, Faun. Parag., p. 43, 1914—Paraguay.

Falco fusco-caerulescens fusco-caerulescens Swann, Syn. List Accip., p. 139, 1920—part, excl. of Mexico; Todd and Carriker, Ann. Carnegie Mus., **14**, p. 161, 1922—Mamatoco, Santa Marta, Colombia (crit.; meas.); Wetmore, Bull. U. S. Nat. Mus., **133**, p. 103, 1926—part, Formosa (Riacho Pilaga); (?)idem, Univ. Calif. Pub. Zool., **24**, p. 422, 1926—Upper Arroyo Las Bayas, Rio Negro and Lago Mosquitos, Cholila, Chubut; Naumburg, Bull. Amer. Mus. N. H., **60**, p. 113, 1930—Rio Nicola Buena, Matto Grosso; Laubmann, Wiss. Erg. Deuts. Gran Chaco Exp., Vögel, p. 96, 1930—Formosa (Mision Tacaagle, Yunca Viejo) and Bolivia (Fortin Esteros, Tarija); Darlington, Bull. Mus. Comp. Zool., **71**, p. 368, 1931—Rio Frio, Magdalena, Colombia; Peters, Bds. World, **1**, p. 294, 1931 (range); Belcher and Smooker, Ibis, 1934, p. 594—Trinidad (nest and eggs descr.); Griscom, Bull. Mus. Comp. Zool., **78**, p. 302, 1935—Agua Dulce, Panama; Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 485, 1936—part, Chubut, Neuquen (Nahuel Huapi), San Luis, Cordoba (Piedra Blanca), Santiago del Estero (Girardet), Chaco (Napalpi), and Jujuy (Santa Catalina); Pinto, Rev. Mus. Paul., **22**, p. 91, 1938—Parana (Castro), Rio Grande do Sul (Novo Hamburgo), Maranhão (Miritiba), Bahia (Joazeiro), Minas Geraes (Pirapora, Marianna) and São Paulo (Avanhandava, Itarare, Butantan, Ypiranga, Villa Ema); Wetmore, Proc. U. S. Nat. Mus., **87**, p. 173, 1939—El Sombrero, Venezuela (tax. notes, *septentrionalis* only valid race).

Rhynchofalco fusco-caerulescens fusco-caerulescens Swann, Syn. Accip., p. 210, 1922—Argentina; idem, Monog. Bds. Prey, **2**, p. 424, 1936—part, Argentina and Tierra del Fuego (monog.).

Rhynchofalco fusco-caerulescens femoralis Swann, Syn. Accip., p. 211, 1922—Venezuela to Brazil; idem, Monog. Bds. Prey, **2**, p. 425, 1936—Venezuela and Guianas to Brazil (monog.).

Falco fusco-caerulescens femoralis Gyldenstolpe, K. Svensk. Vetensk. Acad. Handl., (3), **23**, p. 56, 1945—Bresta, El Beni, Bolivia (disc.).

Range.—Eastern Panama and Colombia (except the southwestern part) east to Venezuela, the Island of Trinidad and British Guiana and south (locally) through Brazil and eastern Bolivia to Paraguay and Argentina (except northwestern part) to Patagonia and Tierra del Fuego.[1]

[1] This form may have to be subdivided, as suggested by Swann, whose nomenclature is, however, incorrect. Birds from Paraguay (topotypical *fusco-caeru-*

Field Museum Collection.—22: British Guiana (Buxton, 1; Demarara, 1); Brazil (Serra Grande, Rio Branco, Amazonas, 1; Rio São Miguel, Goyaz, 1; Rio São Francisco, Bahia, 1; Municipio de Luis, São Paulo, 1; Descalvados, Matto Grosso, 1; Vaccaria, Matto Grosso, 1); Bolivia (Buena Vista, Santa Cruz, 6; Cercado,

lescens), Brazil (*femoralis*), eastern Bolivia (Esperanza, Rio Paraguay), Guiana and Venezuela agree very well together in dimensions and coloring. Two from "Veraguas," while the same size, are rather dark brown above, but they can be matched by one from Mexiana Island and another from Roraima. Birds from Chubut (Valley del Lago Blanco) average larger, some of the females reaching the minimum figures of *pichinchae* in measurements, and are very light and gray above. They cannot be separated with certainty from *septentrionalis* except by their less extensive, medially broken blackish pectoral zone. A female from Buenos Aires (Las Rosas) is similar to the Chubut birds, while three others (males), from Buenos Aires, in size and coloration are exactly like Brazilian specimens. From published records it would seem that the Aplomado Falcon does not breed in Buenos Aires Province and it is quite possible that the birds at hand are migratory visitors, the small dark-backed ones coming from the north, the larger, paler ones being wanderers from Patagonia. We do not feel justified, with the relatively limited material before us, in proposing any formal separation, but if the differences explained above are of geographical significance the breeding birds of Patagonia will have to be provided with a new subspecific term, as all the existing names unquestionably refer to the smaller dark-backed northern individuals.

WING MEASUREMENTS

	Males	Females
septentrionalis	255–260	270–304
pichinchae		
Colombia (Munchique, Cauca)	.....	275
Ecuador	264–267	290–297
Peru	265–270	275–310
Bolivia (Oruro)	.....	267–313
Bolivia (Cochabamba)	278	.....
Chile (Tarapaca)	.....	278
Chile (Santiago, O'Higgins)	256	285–295
Chile (Coquimbo)	270	.....
Argentina (Tucumán)	.....	288
fusco-caerulescens		
Chubut, Patagonia	243–250	275–290
Buenos Aires	240–252	270–280
Salta	247	.....
Paraguay	225–240	.....
Uruguay	237–240	.....
Bolivia (Esperanza)	238–240	270
Matto Grosso	228–230	255
Mexiana Island	238	264
British Guiana	233–240	265
Venezuela	230–240	270
Veraguas	236	265

Additional material examined.—Panama: "Veraguas," 2.—Venezuela: Caracas, 3; Lake of Valencia, Carabobo, 1.—British Guiana: Annai, 2; Upper Takutu Mountains, 1; Rio Rupununi, 1; Roraima, 2.—Brazil: Mexiana Island, 2; Joazeiro, Bahia, 1; Burity, Piauhy, 1; Chapada, Matto Grosso, 3.—Paraguay: Mborero, 1; Villa Rica, 2; Yaci-Veta Island, Rio Paraguay, 2.—Uruguay: Colonia, 1; unspecified, 2.—Bolivia: Esperanza, Rio Paraguay, 3.—Argentina: Los Yngleses, Ajo, 1; Quilmes, Buenos Aires, 1; Santa Elena, Buenos Aires, 1; Las Rosas, Buenos Aires, 2; Buenos Aires, 1; Salta, 1; Chubut, 1; Valle del Lago Blanco, Chubut, 7; Puerto Deseado, Santa Cruz, Patagonia, 1.

Santa Cruz, 2); Paraguay (265 km. west of Puerto Casado, 3; Puerto Casado, 2); Argentina (Tierra del Fuego, Tierra del Fuego, 1).

Falco columbarius subaesalon Brehm.[1] ICELANDIC MERLIN.

Falco subaesalon Brehm, Ornis, **3**, p. 9, 1827—Iceland, migrating to Germany in winter (type formerly in coll. of C. L. Brehm).[2]

Falco alfred-edmundi Kleinschmidt, Falco, **13**, p. 9, May, 1917—Iceland (type probably in coll. of O. Kleinschmidt).

Falco columbarius subaesalon Schiøler, Danm. Fugle, **3**, pp. 325, 336, 338, 1931—Angmagssalik, Greenland (monog.); Peters, Bds. World, **1**, p. 294, 1931—Iceland; Swann, Monog. Bds. Prey, **2**, p. 371, 1936—Iceland; Hartert and Steinbacher, Vog. Pal. Fauna, Erganzungsband, p. 404, 1936—Iceland (crit.).

Falco aesalon aesalon Jourdain, in Bent, Bull. U. S. Nat. Mus., **170**, p. 90, 1938 (life hist.).

Range.—Iceland. Accidental in Greenland[3] and Scotland.[4]

***Falco columbarius columbarius** Linnaeus. EASTERN PIGEON HAWK.

Falco columbarius Linnaeus, Syst. Nat., 10th ed., **1**, p. 90, 1758—based on "The Pigeon Hawk" Catesby, Nat. Hist. Carolina, **1**, p. 3, pl. 3, South Carolina; Jardine, Ann. Mag. Nat. Hist., **18**, p. 118, 1846—Tobago; Sclater and Salvin, Proc. Zool. Soc. Lond., 1869, p. 252—Maruria and Lake of Valencia, Venezuela; Salvin, l.c., 1870, p. 215—Calobre, Veraguas; Sharpe, Cat. Bds. Brit. Mus., **1**, p. 408, 1874 (in part); Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 119, 1901—Mexico to Lion Hill, Panama; Dalmas, Mem. Soc. Zool. France, **13**, p. 132, 1900—Tobago; Salvadori and Festa, Boll. Mus. Zool. Torino, **15**, No. 368, p. 31, 1900—Canar, Ecuador; Riley, in Shattuck, The Bahama Islands, p. 362, 1905—Abaco, New Providence, Andros and Watlings Islands; Stone, Proc. Acad. Nat. Sci. Phila., **65**, p. 196, 1913—Cano Corosal, Orinoco Delta, Venezuela; Cherrie, Sci. Bull., Mus. Brookl. Inst., **2**, p. 348, 1916—Orinoco region,

[1] *Falco columbarius subaesalon* Brehm: Similar in coloration to *F. columbarius aesalon* Tunstall, of northern Europe and the Faroes but larger; wing, 213, (female) 222–235.

[2] The describer had a young male from Iceland, mentioned by him in Naumannia, 1856, p. 216, which probably served as basis for his *F. subaesalon.* It appears to be lost, since Hartert (Nov. Zool., **25**, pp. 4–63, 1918) does not list it among the types in the Brehm Collection.

[3] Schiøler (Danm. Fugle, **3**, p. 338) enumerates the various specimens secured in Greenland, giving in detail their localities and dates of capture. He refers them all to *subaesalon* and it seems that *F. c. aesalon* has not yet been taken in Greenland.

[4] A single adult male ringed as a nestling at Skialdfonn, Iceland, on June 27, 1933, and shot on Strathlen Moor, Dumbartonshire, on April 15, 1936, now in the British Museum, is indeed somewhat larger (wing 207 mm.) than any bird from Scandinavia or Russia. In color, however, it does not differ, being by no means darker, but paler rather on the under parts than the average of *aesalon.*

Venezuela; Chubb, Ibis, 1919, p. 290—Trujillo, Peru (Dec. 1); Lönnberg and Rendahl, Ark. Zool., **14**, No. 25, p. 42, 1922—Carapungo (October), Chaupicruz (April 4, Aug. 10, Nov. 10), Zambiza (Jan., Feb., Sept. 20) and Pomasqui (Nov. 6), Ecuador.

Falco obscurus Gmelin, Syst. Nat., **1**, (1), p. 281, 1789—based on "Dusky Falcon" Pennant, Arct. Zool., **2**, p. 213—New York (type in coll. of Mrs. Blackburne).

Falco intermixtus Daudin, Traité Élém. Comp. d'Orn., **2**, p. 141, 1800—Carolina, South Carolina (type, collected by L. Bosc, in Paris Museum).

Falco temerarius Audubon, Bds. Amer., Folio, pl. 75, 1829; idem, Orn. Biog., **1**, p. 381, 1831—near Tatland Ford, Pennsylvania (type probably lost).

Falco auduboni Blackwall "Research, Zool., p. 193, 1834";[1] idem, l.c., 2nd ed., p. 178, 1873—Philadelphia, Pennsylvania (type in Museum of the Society for the Promotion of Natural History, Manchester).

Hypotriorchis columbarius Sclater, Proc. Zool. Soc. Lond., **26**, p. 450, 1858—Cuenca, Ecuador; Léotaud, Ois. Trinidad, p. 26, 1866—Trinidad; Sclater and Salvin, Proc. Zool. Soc. Lond., 1879, p. 541—Medellin, Antioquia, Colombia; Berlepsch and Hartert, Nov. Zool., **9**, p. 115, 1902—Altagracia (Jan. 29) and Caicara (March 26), Orinoco, Venezuela.

Falco lithofalco var. *columbarius* Baird, Brewer and Ridgway, Hist. N. Amer. Bds., **3**, p. 144, 1874 (monog.).

Aesalon columbarius Gurney, Ibis, 1882, p. 160—Quito and Cuenca, Ecuador.

Falco columbarius columbarius Carriker, Ann. Carnegie Mus., **6**, p. 1470, 1910—San José, Costa Rica; Swann, Syn. List Accip., p. 141, 1920 (range); idem, Syn. Accip., p. 193, 1922 (range); idem, Auk, **38**, p. 364, 1921—Culata, Merida, Venezuela (Sept. 18); Todd and Carriker, Ann. Carnegie Mus., **14**, p. 160, 1922—Bonda, Mendeguaca and Rio Hacha, Colombia; Chapman, Bull. Amer. Mus. N. H., **55**, p. 240, 1926—Esmeraldas (Nov. 9), Zambiza (Feb. 9), and Pintag (Dec. 3), Ecuador; Peters, Bull. Essex County Orn. Cl. for 1926, p. 20, 1927 (chars.; range); idem, Bds. World, **1**, p. 296 (range); Griscom, Bull. Mus. Comp. Zool., **78**, p. 303, 1935—Panama (common in winter); Swann, Monog. Bds. Prey, **2**, p. 366, 1936 (monog.); Bent, Bull. U. S. Nat. Mus., **170**, p. 70, 1938 (life hist.); Borrero, Caldasia, **3**, (14), p. 412, 1945—Sabana de Bogotá.

Range.—Breeds from the limit of trees in eastern Canada south to Newfoundland, Nova Scotia, New Brunswick, northern Maine, Ontario, northern Michigan (Porcupine Mountains) and southern Manitoba (Winnipeg, Assiniboine Valley), west to the eastern border of the Great Plains; winters from the Gulf states south through eastern Mexico, the West Indies, Venezuela, Colombia, and Ecuador to Peru (Trujillo), and the islands of Trinidad and Tobago.[2]

[1] We have not been able to consult the original edition of 1834, which cannot be found in any of the Natural History Libraries in London. *Falco auduboni*, as described in the 1873 edition, is clearly an Eastern Pigeon Hawk. Blackwall's name has even escaped the notice of so diligent a bibliographer as D. C. Sherborn.

[2] In addition to a good series from the United States we have examined the following specimens from South America.—Colombia: Medellin, 1; "Bogotá," 1.—

Field Museum Collection.—62: North Dakota (Nelson County, 1; Ramsey County, 3); Nebraska (Kearney, 1; Haverlock, 1); Arkansas (Fayetteville, 1); Texas (Port Lavaca, 1; Brownsville, 4); Wisconsin (Beaver Dam, 1); Illinois (Beach, 1); Louisiana (Buras, 1); Manitoba (Churchill, 1); Labrador (Battle Harbor, 1; unspecified, 1); Quebec (Magdalen Islands, 4); Maine (Upton, 1; Lincoln, 1); Massachusetts (Monomoy Island, 1); Connecticut (New Haven County, 5; Fairfield County, 2); New York (North Hamlin, 1); New Jersey (Orange, 1); Georgia (Savannah, 2); Florida (Nassau County, 1; Key West, 4; Miami, 1; Brevard County, 2); Cuba (Isle of Pines, 1); Dominican Republic (Puerto Plata, 1; unspecified, 1); Virgin Islands (St. Croix, 2); Jamaica (Surrey, 1; unspecified, 2); Lesser Antilles (Martinique, 2); Colombia (Popayan, 1; Munchique, 2); Venezuela (Rio Aurare, Zulia, 1); Ecuador (Pichincha, 3; Cerro Cayambe, 1).

***Falco columbarius bendirei** Swann.[1] WESTERN PIGEON HAWK.

Falco columbarius bendirei Swann, Bull. Brit. Orn. Cl., **42**, p. 66, Feb. 2, 1922—Fort Walla Walla, Washington (type—migrant, shot on October 18—in Museum of Comparative Zoology, Cambridge, Mass.); idem, Syn. Accip., p. 195, 1922 (range); Peters, Bull. Essex County Orn. Cl. for 1926, p. 22, 1927 (chars.; range); Grinnell, Univ. Calif. Pub. Zool., **32**, p. 111, 1929—Lower California (winter visitor); Peters, Bds. World, **1**, p. 296, 1931 (range); Swann, Condor, **37**, p. 201, 1935 (crit.); Swann, Monog. Bds. Prey, **2**, p. 368, 1936 (monog.); Bent, Bull. U. S. Nat. Mus., **170**, p. 89, 1938 (crit.); van Rossem, Occ. Pap. Mus. Zool. Louisiana State Univ., **21**, p. 63, 1945—Sonora (distrib.).

Range.—Breeds from northwestern Alaska, the Yukon and northwestern Mackenzie to British Columbia, northern and western Alberta, and northern Saskatchewan, south in the mountains to northern California; in winter through California and New Mexico south to the Cape region of Lower California and northeastern Mexico (Matamoros, Tamaulipas); occasionally in Louisiana, Florida and North Carolina.

Venezuela: Culata, Merida, 1 (Oct. 28); Lake of Valencia, Carabobo, 1 (November); Maruria, 1 (October); Caracas, 1.—Ecuador: Carapungo, near Quito, 1 (April 10); Chaupicruz, 1 (Feb. 24).—Peru: Trujillo, 1 (Dec. 1).

[1] *Falco columbarius bendirei* Swann: Very similar to *F. c. columbarius* but paler (neutral gray) above with the rusty edging on nape deeper and more extensive; light tail bands paler as well as more extensive; under parts more suffused with buffy (Peters, Bull. Essex County Orn. Cl. for 1926, p. 22, 1927).

It is with considerable reluctance that we have admitted this form. What material from northwestern America we have seen certainly tends to confirm Swarth's conclusion (Condor, **37**, p. 201, 1935; Pacif. Coast Avif., **22**, p. 25, 1934) that there is no possibility of separating *bendirei* from *columbarius*. Peters, who studied long series of the group, considers it, however, maintainable.

Field Museum Collection.—21: Alaska (Endicott Mountains, 1; Shelton, 1; Circle City, 1; Kodiak Island, 2); British Columbia (Vancouver, 1); Alberta (Beaver Lake, 2); Washington (Tacoma, 1); California (Nicasio, 1; Monterey, 1; Eureka, 1; Witch Creek, 2; Redlands, 1); Colorado (Fort Lyon, 1; Rocky Ford, 1); Arizona (Phoenix, 3); Mexico (Camoa, Sonora, 1).

***Falco columbarius richardsonii** Ridgway. RICHARDSON'S PIGEON HAWK.

Falco (*Hypotriorchis*) *richardsonii* Ridgway, Proc. Acad. Nat. Sci. Phila., **22**, No. 3, Aug.–Dec., 1870, p. 145, pub. March 14, 1871—"interior of North America." [1]

Falco (*Aesalon*) *lithofalco* var. *richardsoni* Baird, Brewer and Ridgway, Hist. N. Amer. Bds., **3**, p. 148, 1874 (monog.).

Falco richardsoni Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 120, 1901—Hermosillo, Sonora, Mexico (Nov. 21).

Falco columbarius richardsonii Swann, Syn. List Accip., p. 142, 1920 (chars.; range); idem, Syn. Accip., p. 194, 1922 (same); Peters, Bull. Essex County Orn. Cl. for 1926, p. 21, 1927 (crit.; range); idem, Bds. World, **1**, p. 296, 1931 (range); Swann, Monog. Bds. Prey, **2**, p. 367, 1936 (monog.); Bent, Bull. U. S. Nat. Mus., **170**, p. 86, 1938 (life hist.); van Rossem, Occ. Pap., Mus. Zool. Louisiana State Univ., **21**, p. 64, 1945—Sonora.

Range.—Breeds in the Great Plains region from central Alberta and Saskatchewan to northern Montana and (?)northwestern North Dakota; in winter, south through Colorado, New Mexico and western Texas to northwestern Mexico (Hermosillo, Sonora).[2] Accidental(?) in California.

Field Museum Collection.—13: Alberta (Rosebud, 1; Beaver Lake, 3; Tofield, 4); Saskatchewan (Maple Creek, 1; Rush Lake, 1); Colorado (Fort Lyon, 2); California (Paradise, Butte County, 1).[3]

***Falco columbarius suckleyi** Ridgway.[4] BLACK PIGEON HAWK.

[1] Three cotypes in the United States National Museum were listed by Ridgway as follows: Adult male, mouth of the Vermilion River, South Dakota; adult female, Berthoud's Pass, Colorado; immature male, Fort Rice, (North) Dakota. The first-named locality is now accepted as terra typica.

[2] The Sonoran specimen collected by Ferrari-Perez is thoroughly typical of *richardsonii*.

[3] This specimen, a one-year-old male taken March 19, is very light in color and typical of *richardsonii*.

[4] *Falco columbarius suckleyi* Ridgway has lately been the subject of some controversy among ornithologists. While no well authenticated eggs have been taken, evidence speaks for its breeding on Vancouver Island, where specimens, both adults and juvenile, have been secured throughout the year, and judging from the

Falco columbarius var. *suckleyi* Ridgway, Bull. Essex Inst., **5**, No. 12, p. 201, Dec., 1873—Shoalwater Bay and Fort Steilacoom, Washington (cotypes in U. S. National Museum); Swarth, Condor, **37**, p. 201, 1935 (crit.).

Falco (*Aesalon*) *lithofalco* var. *suckleyi* Baird, Brewer and Ridgway, Hist. N. Amer. Bds., **3**, p. 147, 1874 (monog.).

Falco columbarius suckleyi Swann, Syn. List Accip., p. 141, 1920—Sitka to northern California (chars.); idem, Syn. Accip., p. 194, 1922—Sitka to British Columbia;[1] Swarth, Univ. Calif. Pub. Zool., **24**, p. 337, 1924—Kispiox Valley, Skeena River, British Columbia (Sept. 12); Brooks and Swarth, Pacif. Coast Avif., **17**, p. 58, 1925 (range in British Columbia); Swarth, Univ. Calif. Pub. Zool., **30**, p. 112, 1926—Atlin region, British Columbia (Aug. 15, 28); Peters, Bull. Essex County Orn. Cl. for 1926, p. 24, May, 1927 (chars.; range); idem, Bds. World, **1**, p. 296, 1931 (range); Sutton, Auk, **52**, p. 79, 1935—Blue River, British Columbia (June 16); Laing, Auk, **52**, p. 305, 1935 (crit.); Swann, Monog. Bds. Prey, **2**, p. 396, 1936 (monog.); Bent, Bull. U. S. Nat. Mus., **170**, p. 83, 1938 (life hist.); Laing, Auk, **55**, p. 525, 1938—Vancouver Island (status; breeding); Miller, Condor, **43**, p. 199, 1941—Claremont and Pasadena, California; Jewett, Condor, **46**, p. 206, 1944—Abiquiu, Rio Arriba County, New Mexico (winter specimen).

Range.—Not definitely known. Breeds apparently on Vancouver Island and in British Columbia (probable nesting records from Oliver, southern Okanagan Valley [June 10] and Blue River, junction of Blue and North Thompson rivers [June 16], east of the Cascades). Winters in the Pacific coast region of North America from British Columbia to northern California.[2] Accidental in New Mexico.

Field Museum Collection.—8: British Columbia (Victoria, 1; Vancouver Island, 1; New Westminster, 1; Vancouver, 1; Okanagan, 1); Washington (Tacoma, 1); Oregon (Tillamook, 2).

*Falco tinnunculus tinnunculus Linnaeus. KESTREL.

Falco tinnunculus Linnaeus, Syst. Nat., 10th ed., **1**, p. 90, 1758—"in Europae turribus etc."=Sweden; Cory, Auk, **5**, pp. 110, 205, 1888—Strawberry Hill, Nantasket Beach, Massachusetts (Sept. 29, 1887).

dates (June) the records from Oliver and Blue River in the interior of British Columbia probably also refer to breeding birds. The fact that wherever *suckleyi* occurs it is mostly associated with *columbarius*, suggests the idea that it might be merely a dark color phase of that form, whose occurrence is restricted to the northwest. This theory has been advanced by Swarth and, although not favored by Laing, it still should be carefully taken into consideration.

[1] The statement "in winter s. cas. to Venezuela" is clearly a mistake. It is dropped in the "Monograph of Birds of Prey." All winter-taken Venezuela birds seen by us are unquestionably *columbarius*.

[2] Peters (Bds. World, **1**, p. 296, 1931) includes "Kodiak Island" in the breeding range, we do not know on whose authority. Birds from the neighboring Sitkalidak Islands are, as pointed out by Swarth (Condor, **37**, p. 202, 1935; Pacif. Coast Avif., **22**, p. 25, 1934), *F. c. columbarius*=*F. c. bendirei*.

Falco tinnunculus tinnunculus Jourdain, in Bent, Bull. U. S. Nat. Mus., **170**, p. 99, 1938 (life hist.; range).

Range.—Northern part of the Eastern Hemisphere. Accidental in Massachusetts (Nantasket Beach, Sept. 29, 1887).[1]

Field Museum Collection.—1: Massachusetts (Strawberry Hill, Nantasket, 1).

***Falco sparverius sparverius** Linnaeus. EASTERN SPARROW HAWK.

Falco sparverius Linnaeus, Syst. Nat., 10th ed., **1**, p. 90, 1758—based on "The Little Hawk" Catesby, Nat. Hist. Carolina, **1**, p. 5, pl. 5, South Carolina.

Falco noveboracensis Gmelin, Syst. Nat., **1**, (1), p. 284, 1788—based on "New York Merlin" Latham, Gen. Syn. Bds., **1**, (1), p. 107, New York (type in coll. of Captain Davies).

Falco (Tinnunculus) sparverius var. *sparverius* Baird, Brewer and Ridgway, Hist. N. Amer. Bds., **3**, p. 169, 1874 (monog.).

Cerchneis sparveria Sharpe, Cat. Bds. Brit. Mus., **1**, p. 437, 1874 (monog.).

Tinnunculus sparverius Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 121, 1901—Mexico (in part) to Panama.

Cerchneis sparveria phaloena (not *Tinnunculus phalaena* Lesson?) Carriker, Ann. Carnegie Mus., **6**, p. 470, 1910—Costa Rica (winter visitor).

Falco sparverius sparverius Rendahl, Ark. Zool., **12**, No. 8, p. 9, 1919—Costa Rica (Siquirres; Oct. 4) and Nicaragua (San Juan del Norte, Nov. 24; Masaya, Dec. 11; Granada, Dec. 18; Zapatera, Feb. 12; Rio Ometepe, Jan.–Feb.); Peters, Bds. World, **1**, p. 302, 1931 (range); van Rossem, Trans. San Diego Soc. N. H., **6**, p. 244, 1931—thirty miles southwest of Magdalena, Obregon and Tesia, Sonora (Apr. 24., Nov. 1, Dec. 15); idem, Bull. Mus. Comp. Zool., **77**, p. 430, 1934—Sonora (Guaymas, Alamos, south of San Pedro) and Chihuahua (Chihuahua, Carmen, Durazno) (winter visitor); Griscom, l.c., **78**, p. 303, 1935—Panama (winter visitor); Van Tyne and Sutton, Misc. Pub., Mus. Zool. Univ. Mich., **37**, p. 26, 1937—Brewster County, Texas; Bent, Bull. U. S. Nat. Mus., **170**, p. 106, 1938 (life hist.); Traylor, Field Mus. Nat. Hist., Zool. Ser., **24**, p. 204, 1941—Mexico (Matamoros, Campeche; Chichen Itza, Yucatan); Wetmore, Proc. U. S. Nat. Mus., **89**, p. 533, 1941—Guatemala (Antigua; Duenas; Sierra Santa Elena); van Rossem, Occ. Pap. Mus. Zool. Louisiana State Univ., **21**, p. 64, 1945—Sonora (distrib.).

Cerchneis sparveria guatemalensis Swann, Syn. List Accip., p. 156, 1920—Capetillo, Guatemala[2] (type in coll. of H. K. Swann, now in Museum of

[1] Hagerup's record (Birds of Greenland, p. 57, 1891) is open to doubt. The species is not admitted to the Greenland fauna by Schiøler (Danm. Fugle, **2**, pp. 44–48, 1926). Cf. also Jourdain, in Bent (Bull. U. S. Nat. Mus., **170**, pp. 99–100, 1938).

[2] According to the footnote the specimen in the Swann Collection must be regarded as the type. Both Bangs and Griscom pronounce it to be an immature

Comparative Zoology, Cambridge, Mass.; cf. Bangs, Bull. Mus. Comp. Zool., **70**, p. 194, 1930); idem, Syn. Accip., p. 225, 1922—Central America.

Cerchneis sparveria sparveria Griscom, Bull. Amer. Mus. N. H., **64**, p. 165, 1932—La Montanita, Finca Carolina, La Perla, San Lucas, Barrillos, Secanquim, and Capetillo, Guatemala (winter visitor).

Cerchneis sparverius sparverius Swann, Monog. Bds. Prey, **2**, p. 458, 1945 (monog.).

Range.—Breeds from the upper Yukon, northwestern Mackenzie, southern Keewatin and Newfoundland south to northern California, eastern Texas, northern Alabama, and North Carolina; winters south to eastern Panama.

Field Museum Collection.—242: Yukon Territory (Yukon River, 1); British Columbia (Comox, Vancouver Island, 1; Sumas, 2; Okanagan, 1); Saskatchewan (Maple Creek, 5; Big Stick Timber, 3; Cypress Hill, 1); Washington (Clallam Bay, 1); Oregon (Corvallis, 4; Seaside, 1; Eagle Point, 1; Tillamook, 1; Imnaha, 1); California (Clipper Gap, 1; Battle Creek, 1; Loreto, 1; Alameda, 1; Wasco, 1; Sisson, 2; Sherwood, 2; Marin County, 3; Los Angeles County, 2; Witch Creek, 20; Lakeside, 1; San Diego, 1; Newberry Springs, 1; Marlbro Grande, 1; Ontario, 1); Arizona (Cochise County, 5; Tucson, 5; Calabasas, 2); Montana (Park County, 1; Miles City, 4); Idaho (Payette, 1; Coeur d'Alene, 2; Montpelier, 1); Utah (Salt Lake City, 1); Colorado (Fort Lyon, 1; New Castle, 12; Hot Sulphur Springs, 1; Gore Range, 2; Rocky Ford, 2; Beulah, 1); New Mexico (Mimbres, 3); Texas (Shumla, 1; Nueces River, 3; Ingram, 1; Cameron County, 1; Austin, 2; Giddings, 1; Dallas, 1); Oklahoma (Woodward County, 1); North Dakota (Eddy County, 1; Nelson County, 9; Ramsey County, 3; Rolette County, 12; Towner County, 1); Iowa (Hillsboro, 1); Kansas (Madison, 1); Arkansas (Stuttgart, 1; Winslow, 2); Wisconsin (Beaver Dam, 4); Indiana (Bluffton, 2); Illinois (Chicago, 1; Lewistown, 2); Ohio (Columbus, 1); Maine (Lincoln, 3); Connecticut (East Hartford, 1; New Haven County, 17; Stamford, 2; Lyme, 1); New York (Shelter Island, 1; Brockport, 1); Georgia (Roswell, 2; Chatham County, 1); Florida (City Point, 1; Miami Beach, 1; Key West, 1); Mexico (San José del Cabo, Lower California, 1; Camoa, Sonora, 3; San Simon, Sinaloa, 3; Pacheco, Chihuahua, 1; Sierra Tarahumare, Chihuahua, 1; Minaca, Chihuahua, 2; Sabinas, Coahuila, 1; Cerro Potosi, Nuevo Leon, 3; Matamoros, Campeche, 1; Pacaitun, Campeche, 1; Chichen Itza,

Eastern Sparrow Hawk taken on migration, *C. s. guatemalensis* thus becoming a pure synonym of *sparverius*. The British Museum "cotype" from Huehuetenango, collected by Richardson on June 19, 1897, however, is *F. s. tropicalis*, the resident Guatemalan race.

Yucatan, 4); El Salvador (Los Esesmiles, Chalatenango, 1; Divisadero, Morazan, 2; Mount Cacaguatique, Morazan, 1); Guatemala (Sierra Santa Elena, Chimaltenango, 2; Volcan Tajamulco, San Marcos, 8; Tiquisate, Escuintla, 1; Concepción del Mar, Escuintla, 1; Gualan, Zacapa, 1; Bobos, Izabal, 2; Los Amates, Izabal, 1); Honduras (Cerro Cantoral, Tegucigalpa, 1); Nicaragua (San Gerónimo, Chinandega, 1; Matagalpa, 1); Costa Rica (Volcan Turrialba, 1; Cartago, 1; Coliblanco, Cartago, 1; Guayabo, Cartago, 4; Filadelphia, Guanacaste, 1).[1]

***Falco sparverius phalaena** (Lesson).[2] DESERT SPARROW HAWK.

Tinnunculus phalaena Lesson, Echo du Monde Sav., No. 46, col. 1887, June 19, 1845—San Blas (Nayarit) and Acapulco (Guerrero), Mexico (location of type not stated);[3] idem, Oeuvr. Buffon, ed. Lévéque, **20**, (Descr. Mamm. Ois.), p. 178, 1847 (reprint).

Falco sparverius deserticolus Mearns, Auk, **9**, p. 263, July, 1892—Fort Verde, Arizona (type in the American Museum of Natural History, New York); Brewster, Bull. Mus. Comp. Zool., **41**, p. 90, 1902—San José del Cabo and Triunfo, Lower California; Bond, Condor, **45**, p. 172, 1943 (synonym typical race).

Tinnunculus sparverius Salvin and Godman, Biol. Centr.-Amer., Aves, **3**, p. 121, 1901 (in part).

Falco sparverius phalaena Nelson, Auk, **19**, p. 398, 1902—western Mexico (crit.); Grinnell, Univ. Calif. Pub. Zool., **32**, p. 112, 1929—northern Lower California; Peters, Bds. World, **1**, p. 303, 1931 (range); van Rossem, Trans. San Diego Soc. N. H., **6**, p. 244, 1931—Sonora (El Doctor, Jan.; Tecoripa, March 2–29; Obregon, Nov. 2; Guaymas, Apr. 24, May 3; west of Magdalena, Feb. 2; south of Nogales, Feb. 17); idem, Bull. Mus. Comp. Zool., **77**, p. 430, 1934—Sonora (Alamos, March 13; Cumpas, Feb. 3); Griscom, l.c., **75**, p. 374, 1934—Acapulco, Taxco and Chilpancingo, Guerrero (Oct. 12–Mar. 15); Bent, Bull. U. S. Nat. Mus., **170**, p. 121, 1938 (life hist.); Wetmore, Proc. U. S. Nat. Mus., **89**, p. 534,

[1] Examination of the series in Field Museum does not bear out the validity of the race *phalaena*, which Hellmayr regarded as a "very poor one." Neither in size nor coloration do birds from the southwest differ from those from the north and east. Therefore no distinction has been made in the list of specimens. See also Wetmore (Proc. U. S. Nat. Mus., **89**, p. 533, 1941) and Bond (Condor, **45**, p. 171, 1943).—B.C.

[2] *Falco sparverius phalaena* (Lesson), a very poor race, is barely distinguishable by rather larger size and paler rufous upper parts. The applicability of Lesson's term *phalaena* to the present form is altogether uncertain. No Kestrel appears to breed at San Blas or Acapulco, but both the Eastern and the Desert Sparrow Hawk are common winter visitors along the coast of western Mexico. There is no means of telling from Lesson's description which of the two races he had in mind. I would rather reject his name in favor of *deserticolus* Mearns.—C.E.H.

[3] Probably in the Museum of the Medical School at Rochefort, France, where part of Lesson's private collection was deposited.

1941 (synonym typical race); Bond, Condor, **45**, p. 171 (in text), 1943 (synonym typical race).

Cerchneis sparveria phalaena Miller, Bull. Amer. Mus. N. H., **21**, p. 345, 1905—Escuinapa, Sinaloa (Jan. 29); idem, l.c., **22**, p. 163, 1906—Rio Sestin (breeding) and Santa Rosalia (Nov.), Durango, Mexico; Swann, Syn. List Accip., p. 154, 1920 (range imaginary); idem, Syn. Accip., p. 223, 1922 (same).

Falco sparverius sparverius (not of Linnaeus) Swarth, Pac. Coast Avif., **10**, p. 28, 1914—Arizona (breeding).

Cerchneis sparverius phalaena Swann, Monog. Bds. Prey, **2**, p. 460, 1945 (monog.).

Range.—Breeds from western Texas, southern New Mexico, Arizona, southern Nevada, and southern California south to northern Lower California and northwestern Mexico (Sonora to Durango); winters south to the Isthmus of Tehuantepec.[1]

***Falco sparverius peninsularis** Mearns.[2] SAN LUCAS SPARROW HAWK.

Falco sparverius peninsularis Mearns, Auk, **9**, p. 267, July, 1892—San José (del Cabo), Lower California (type in U. S. National Museum); Brewster, Bull. Mus. Comp. Zool., **41**, p. 90, 1902—Cape Region of Lower California; Grinnell, Univ. Calif. Pub. Zool., **32**, p. 112, 1929—Cape district of Lower California; Peters, Bds. World, **1**, p. 303, 1931 (range); Bent, Bull. U. S. Nat. Mus., **170**, p. 124, 1938 (life hist.); van Rossem, Occ. Pap. Mus. Zool. Louisiana State Univ., **21**, p. 65, 1945—Sonora (resident).

Cerchneis sparveria peninsularis Swann, Syn. List Accip., p. 154, 1920 (range); idem, Syn. Accip., p. 224, 1922 (range).

Cerchneis sparverius peninsularis Swann, Monog. Bds. Prey, **2**, p. 462, 1945 (monog.).

Range.—Southern Lower California and Sonora, Mexico.

Field Museum Collection.—7: Mexico, Lower California (San José del Cabo, 1; El Valle, 2; San Bruno, 1; Santa Anita, 1; Sierra Laguna, 1; La Paz, 1).

Falco sparverius guadalupensis Bond.[3] GUADALUPE ISLAND SPARROW HAWK.

[1] For list of specimens see footnote 1, page 324.

[2] *Falco sparverius peninsularis* Mearns differs from the two preceding races by smaller size, proportionately larger bill, and paler coloration.

[3] *Falco sparverius guadalupensis* Bond: Said to be much larger than *peninsularis*, with the light collar on back of neck relatively lighter than in the typical race or *peninsularis*. Bill relatively small. This form is unknown to the authors.

Falco sparverius guadalupensis Bond, Condor, **45**, p. 179, Sept. 24, 1943—Guadalupe Island, Lower California, Mexico (type in Museum of Comparative Zoology, Cambridge, Mass.).

Range.—Island of Guadalupe, Lower California, Mexico.

***Falco sparverius paulus** (Howe and King).[1] LITTLE SPARROW HAWK.

Cerchneis sparverius paulus Howe and King, Contr. N. Amer. Orn., **1**, p. 28, May 21, 1902—Miami, Florida (type in Museum of Comparative Zoology, Cambridge, Mass.; cf. Bangs, Bull. Mus. Comp. Zool., **70**, p. 194, 1930); Swann, Syn. List Accip., p. 155, 1920—Florida (?Bahama Islands); idem, Syn. Accip., p. 224, 1922—Florida (?Bahama Islands).

Falco sparverius paulus Peters, Bds. World, **1**, p. 302, 1931 (range); Bent, Bull. U. S. Nat. Mus., **170**, p. 125, 1938 (life hist.).

Cerchneis sparverius paula Swann, Monog. Bds. Prey, **2**, p. 461, 1945 (monog.).

Range.—Southern Alabama (probably also Mississippi) to South Carolina and south over the Florida Peninsula.[2]

Field Museum Collection.—45: Georgia (King's Bay, 1); Florida (Peniel, 1; Gainesville, 4; Bradford County, 2; Brevard County, 4; Dade County, 5; Duval County, 1; Dunedin, 1; Pine Island, 2; Nassau County, 4; Osceola County, 1; Palm Beach County, 10; Anclote, 4; Manatee, 1; Enterprise, 3; Naples, 1).

***Falco sparverius tropicalis** (Griscom).[3] GUATEMALAN SPARROW HAWK.

Cerchneis sparveria tropicalis Griscom, Amer. Mus. Nov., **414**, p. 1, Mar. 24, 1930—Antigua, Guatemala (type in Dwight Collection, American Museum of Natural History, New York); idem, Bull. Amer. Mus. N. H., **64**, p. 165, 1932—Antigua; idem, Ibis, 1935, p. 810—Sierra de las Minas, Guatemala.

[1] *Falco sparverius paulus* (Howe and King): Nearest to *F. s. sparverius* but smaller, with larger bill and rufous of upper parts including wings and tail decidedly darker.

[2] Bryant's sight records (Proc. Bost. Soc. N. H., **7**, p. 105, 1859) of *Tinnunculus sparverius* from Nassau (New Providence) and Great Stirrup Cay have never been confirmed by the taking of specimens of any Sparrow Hawk in the Bahama Islands.

[3] *Falco sparverius tropicalis* (Griscom): Similar to *F. s. sparverius* but smaller and much darker rufous above; males with the crown either uniform deep neutral gray or with mere traces of rufous in the middle. Wing, 180–185; tail, 120–125 mm.

This form is evidently widely distributed over the highlands of Guatemala. The British Museum has two breeding adults from the Sierra de las Minas (July) and an adult male from Huehuetenango (June), all collected by W. B. Richardson. An adult male from Volcan de Agua, above San Diego, obtained by O. Salvin in November, is likewise typical. Griscom's measurements for the males are below the normal, as shown in our specimens.

Falco sparverius tropicalis Peters, Bds. World, **1**, p. 303, 1931—Guatemala.

Cerchneis sparverius tropicalis Swann, Monog. Bds. Prey, **2**, p. 465, 1945—part, Guatemala (monog.).

Range.—Highlands of Guatemala (resident).

Field Museum Collection.—4: Guatemala (Sierra St. Elena, Solola, 1; Tecpam, Solola, 1; Acatenango, Chimaltenango, 1; Volcan Tajamulco, San Marcos, 1).

***Falco sparverius sparverioides** Vigors.[1] CUBAN SPARROW HAWK.

Falco Sparverioides Vigors, Zool. Journ., **3**, No. 11, p. 436, Dec., 1827—neighborhood of Havana, Cuba (descr. of dark phase; type in coll. of N. A. Vigors, present whereabouts unknown); Fraser, Zool. Typ., Part 5, pl. 30 (dark phase), 1846—Cuba; Cabanis, Journ. Orn., **1**, Extraheft, p. lxxvi, 1854—Cuba (plumages; crit.); Cory, Auk, **4**, p. 45, 1887—Cuba (dark phase); idem, Bds. W. Indies, p. 203, 1889—Cuba (dark phase); idem, Cat. W. Ind. Bds., pp. 99, 139, 140, 1892—Cuba (color phases); Chapman, Bull. Amer. Mus. N. H., **4**, p. 294, 1892—near Trinidad, Cuba (plumages); Todd, Ann. Carnegie Mus., **10**, p. 195, 1916—Bibijagua, Los Indios, and Nueva Gerona, Isle of Pines (crit.; plumages); Barbour, Mem. Nutt. Orn. Cl., **6**, p. 49, 1923—Cuba (crit.; plumages).

Falco sparverius (not of Linnaeus) d'Orbigny, in Sagra, Hist. Ile Cuba, Ois., p. 25, pl. 1, 1839—Cuba.

Tinnunculus dominicensis (not *Falco dominicensis* Gmelin) Gundlach, Journ. Orn., **1**, Extraheft, p. lxxxiv, 1854—Cuba (crit.; plumages); Gundlach, in Poey, Rep. Hist. Nat. Cuba, **1**, p. 225, 1865—Cuba (nesting in March and April); idem, Journ. Orn., **19**, p. 373, 1871—Cuba (habits).

Tinnunculus sparverioides Lawrence, Ann. Lyc. Nat. Hist. N. Y., **7**, p. 247, 1860—Cuba (descr.; plumages); Ridgway, Proc. Acad. Nat. Sci. Phila., 1870, p. 149 (dark phase).

Falco (Tinnunculus) leucophrys Ridgway, Proc. Acad. Nat. Sci. Phila., for Dec., 1870, p. 147—part, Cuba (cotypes, from Remedios, Cuba, in U. S. National Museum; descr. of light phase); idem, in Baird, Brewer and Ridgway, Hist. N. Amer. Bds., **3**, p. 161, 1874—part, Cuba (crit.).

Cerchneis leucophrys Sharpe, Cat. Bds. Brit. Mus., **1**, p. 442, 1874—Cuba (light phase).

Tinnunculus sparveroides Ridgway, in Baird, Brewer and Ridgway, Hist. N. Amer. Bds., **3**, p. 162, 1874—Cuba (crit.).

Cerchneis sparverioides Sharpe, Cat. Bds. Brit. Mus., **1**, p. 443, 1874—Cuba (dark phase).

[1] *Falco sparverius sparverioides* Vigors is remarkable for occurring in two distinct color phases (*sparverioides* and *leucophrys*). Failure to understand their significance, although the true nature of the variation had been ascertained by that excellent naturalist Juan Gundlach long ago, caused considerable confusion.

Among the additional twenty-five Cuban examples examined at the British Museum there are two or three which are just intermediate between the two color-types.

Falco dominicensis Ridgway, Auk, 8, p. 113, 1891—Cuba (crit.; phases).

Cerchneis sparveria dominicensis Bangs and Zappey, Amer. Natur., 39, p. 191, 1905—Santa Fe, San Juan, Jucaro, Laguna Grande and Los Almacigos, Isle of Pines; Swann, Syn. List Accip., p. 156, 1920—part, Cuba; idem, Syn. Accip., p. 225, 1922—part, Cuba.

Falco sparverius sparveroides (sic) Peters, Bds. World, 1, p. 303, 1931—Cuba and Isle of Pines.

Falco sparverius sparverioides Wetmore, Proc. U. S. Nat. Mus., 81, p. 15, 1932—Rio Gibara and Rio Fabrico, Cuba; Danforth, Journ. Agric. Univ. Puerto Rico, 19, p. 435, 1935—Cuba (food).

Cerchneis sparverius sparverioides Swann, Monog. Bds. Prey, 2, p. 462, 1945 (monog.).

Range.—Island of Cuba and Isle of Pines, Greater Antilles.[1]

Field Museum Collection.—26: Cuba (unspecified, 3; San Diego de los Baños, Camaguey, 2; Yateras, 5; Santiago, 2; Guaro, 1; Santa Clara, 3; Guantanamo, 9; Isle of Pines, 1).

*Falco sparverius dominicensis Gmelin.[2] HISPANIOLAN SPARROW HAWK.

Falco dominicensis Gmelin, Syst. Nat., 1, (1), p. 285, 1788—based on "L'Emerillon de S. Domingue" Brisson, Orn., 1, p. 389, pl. 32, fig. 2, San Domingo (type in Reaumur Collection); Bryant, Proc. Bost. Soc. N. H., 11, p. 90, 1867—Hispaniola; Cory, Auk, 4, p. 44, 1887—part, Haiti and San Domingo; idem, Cat. W. Ind. Bds., pp. 99, 140, 1892—part, Haiti and San Domingo (crit.); Cherrie, Field Columb. Mus., Orn. Ser., 1, p. 23, 1896—Santo Domingo; Verrill, Proc. Acad. Nat. Sci. Phila., 1909, p. 358—Dominican Republic.

Tinnunculus sparverius (not *Falco sparverius* Linnaeus) Salle, Proc. Zool. Soc. Lond., 25, p. 231, 1857—Nizao, Dominican Republic.

Falco (Hypotriorchis) ferrugineus (not *Falco ferrugineus* Nordmann, 1835) Saussure, Rev. Mag. Zool., (2), 11, p. 117, pl. 3, fig. 1, 1859—Saint Domingue (type in coll. of H. de Saussure).[3]

Cerchneis dominicensis Sharpe, Cat. Bds. Brit. Mus., 1, p. 439, 1874—part, Santo Domingo.

[1] Hartlaub (Naumannia, 2, Heft 2, p. 52, 1852) quotes from Wurttemberg's manuscript *Falco mercurialis* and *Falco plumbiceps*, which are practically nomina nuda. Both are said to occur in Cuba as well as in Haiti.

[2] *Falco sparverius dominicensis* Gmelin closely resembles *F. s. sparverioides* but is somewhat larger and apparently never so strongly rufous below as are a good many Cuban specimens. The phase with nearly uniform slate gray upper parts and deep rufous breast does not seem to exist in Hispaniola.

[3] Unlike the types of the two other species described by Saussure in the same paper, which I have examined in September, 1938, the original specimen of this falcon did not pass into the collection of the Natural History Museum at Geneva. The figure shows the under parts deep rufous with coarse black markings, just as in females of the dark Cuban variety, while the dorsal surface is described as "noir-brunnâtre faiblement moucheté de roue." Although I have not seen any

Falco sparverius dominicensis Peters, Bull. Mus. Comp. Zool., **61**, p. 401, 1917—Monte Cristi, Sosua and Choco, Dominican Republic; Bond, Proc. Acad. Nat. Sci. Phila., **80**, p. 493, 1928—Haiti, including Tortue and Gonave Islands; Danforth, Auk, **46**, p. 362, 1929—Hispaniola; Moltoni, Atti Soc. Ital. Sci. Nat., **68**, p. 310, 1929—Haina and Moca; Peters, Bds. World, **1**, p. 303, 1931—Hispaniola; Wetmore and Swales, Bull. U. S. Nat. Mus., **155**, p. 119, 1931—Hispaniola (monog.); Wetmore, Proc. U. S. Nat. Mus., **81**, p. 15, 1932—Gonave Island, Thomazeau, Petite Cayemite Island, and Ile à Vache; idem and Lincoln, l.c., **82**, No. 25, p. 21, 1933—Hispaniola.

Cerchneis sparveria dominicensis Swann, Syn. List Accip., p. 156, 1920—part, San Domingo; idem, Syn. Accip., p. 225, 1922—part, San Domingo.

Cerchneis sparverius dominicensis Swann, Monog. Bds. Prey, **2**, p. 463, 1945—Hispaniola, Gonave, Tortue, Ile à Vache (monog.).

Range.—Island of Hispaniola, Greater Antilles, including adjacent islands of Gonave, Tortue, and Ile à Vache.

Field Museum Collection.—28: Dominican Republic (La Vega, 3; Puerto Plata, 8; Magua, 5); Haiti (Ganthier Lake, 3; Jacmel, 4; Kenscoff, 3; Port au Prince, 1; Tortuga, 1).

***Falco sparverius caribaearum** Gmelin. CARIBBEAN SPARROW HAWK.

Falco caribaearum Gmelin, Syst. Nat., **1**, (1), p. 284, 1788—based on "L'Emerillon des Antilles," Brisson, Orn., **1**, p. 111, 1763, which in its turn goes back to "L'Emerillon Gry Gry" du Tertre, Hist. des Antilles, **2**, p. 253—Antilles=Guadeloupe (as suggested by Berlepsch, Journ. Orn., **40**, p. 92, 1892).

Tinnunculus sparverius (not *Falco sparverius* Linnaeus) Newton, Ibis, 1859, p. 63—St. Croix; Cassin, Proc. Acad. Nat. Sci. Phila., 1860, p. 374—St. Thomas; Sclater, Proc. Zool. Soc. Lond., 1871, p. 273—Santa Lucia (crit.); Semper, l.c., 1872, p. 652—Santa Lucia (habits); Gundlach, Journ. Orn., **22**, pp. 310, 315, 1874—Puerto Rico; idem, l.c., **26**, pp. 158, 163, 1878—Puerto Rico (crit.).

Falco dominicensis (not of Gmelin) Bryant, Proc. Bost. Soc. N. H., **10**, p. 249, 1866—Puerto Rico; Cory, Auk, **4**, p. 44, 1887—part, Puerto Rico; idem, Bds. W. Ind., p. 202, 1889—part, Puerto Rico; idem, Auk, **7**, pp. 374, 375, 1890—Anegada, Tortola and Virgin Gorda; idem, Cat. W. Ind. Bds., p. 99, 1892—part, Puerto Rico; Bowdish, Auk, **19**, p. 361, 1902—Puerto Rico.

Falco sparverius Sundevall, Öfvers. Vetensk. Akad. Handl., **26**, pp. 586, 601, 1869—St. Bartholomew and Puerto Rico; Feilden, Ibis, 1889, p. 489—Barbados (sight record).

bird like Saussure's plate, it can hardly be anything but an individual variety of the female Hispaniolan Sparrow Hawk. Fortunately, the name is preoccupied. —C.E.H.

For further remarks on this type see Hellmayr, Rev. Suisse Zool. Genève, **49**, p. 560, 1942. This paper was unavailable to the junior author.—B.C.

(*Tinnunculus sparverius*) var. *dominicensis* Ridgway, in Baird, Brewer and Ridgway, Hist. N. Amer. Bds., **3**, p. 167, 1874—Lesser Antilles to St. Thomas (crit.).

Tinnunculus sparverius var. *antillarum*[1] "Gmelin"; Lawrence, Proc. U. S. Nat. Mus., **1**, pp. 65, 236, 240, 1878—Dominica, Antigua and Barbuda; idem, l.c., **1**, pp. 274, 359, 459, 1879—Grenada (rare), Martinique and Guadeloupe.

Tinnunculus dominicensis Gundlach, Anal. Soc. Esp. Hist. Nat., **7**, p. 163, 1878—Puerto Rico.

Tinnunculus sparverius antillarum Allen, Bull. Nutt. Orn. Cl., **5**, p. 169, 1880—Santa Lucia (crit.).

Tinnunculus antillarum Gurney, Ibis, 1881, pp. 547, 551, 556, 560—St. Croix, Guadeloupe, Dominica, Santa Lucia, etc. (crit.).

Tinnunculus caribbaearum Grisdale, Ibis, 1882, p. 491—Montserrat; Ridgway, Proc. U. S. Nat. Mus., **7**, p. 172, 1884—St. Thomas; Sclater, Proc. Zool. Soc. Lond., 1889, p. 326—Dominica; idem, l.c., 1892, p. 499—Anguilla.

Falco sparverius caribbaearum Cory, Ibis, 1886, p. 474—Marie Galante and La Desirade; Clark, Proc. Bost. Soc. N. H., **32**, p. 240, 1905—Barbados (ex Feilden), St. Vincent (Kingstown, Feb. 6, 1904), Beguia (Dec. 2, 1903), and Grenada (windward district); Wetmore, Sci. Surv. Porto Rico and Virgin Islands, **9**, p. 327, 1927—Puerto Rico, Virgin Islands (crit.; habits); Peters, Auk, **44**, p. 534, 1927—Anguilla; Bond, Proc. Acad. Nat. Sci. Phila., **80**, p. 527, 1928—Dominica and Santa Lucia; Danforth, Journ. Dept. Agric. Porto Rico, **14**, p. 115, 1930—St. Croix, Tortola, and Virgin Gorda; Beatty, l.c., p. 139, 1930—St. Croix; Peters, Bds. World, **1**, p. 303, 1931 (range); Danforth, Auk, **31**, p. 357, 1934—Antigua; idem, Monog. Univ. Puerto Rico, Ser. B, No. 3, p. 26, 1935—Santa Lucia.

Falco caribbaearum Cory, Auk, **4**, p. 46, 1887 (descr.); Sclater, Proc. Zool. Soc. Lond., 1889, p. 395—Santa Lucia; Cory, Bds. W. Ind., p. 204, 1889—Lesser Antilles; idem, Auk, **7**, p. 374, 1890—Anegada; idem, Auk, **8**, pp. 46–48, 1891—Anguilla, Antigua, St. Eustatius, St. Croix, St. Kitts and Guadeloupe; idem, Cat. W. Ind. Bds., pp. 99, 139, 140, 1892—Puerto Rico and Antilles; Verrill, Trans. Conn. Acad. Sci., **8**, p. 326, 1892—Dominica; Nicoll, Ibis, 1905, p. 572—Montserrat.

Tinnunculus sparverius caribbaearum Wells, Proc. U. S. Nat. Mus., **9**, p. 622, 1887—Grenada (rare resident).

Cerchneis sparveria caribaearum Riley, Smiths. Misc. Coll., **47**, p. 282, 1904—Barbuda and Antigua; Noble, Bull. Mus. Comp. Zool., **60**, p. 365, 1916—Guadeloupe; Swann, Syn. List Accip., p. 155, 1920 (range); idem, Syn. Accip., p. 224, 1922 (range).

Cerchneis sparveria loquacula Riley, Smiths. Misc. Coll., **47**, p. 284, Nov. 9, 1904—Isabel II, Vieques Island, Puerto Rico (type in U. S. National Museum); Danforth, Journ. Dept. Agric. Porto Rico, **10**, p. 86, 1926—Cartagena Lagoon, Puerto Rico.

Falco sparverius loquacula Wetmore, Bull. U. S. Dept. Agric., **326**, p. 31, 1916—Puerto Rico, Vieques and Culebra; idem, Auk, **33**, p. 410, 1916—Vieques;

[1] Evidently a pen-slip for *caribaearum*.

idem, l.c., **34**, p. 57, 1917—Culebra; Struthers, l.c., **40**, p. 471, 1923—Anasco, Puerto Rico; Peters, Bds. World, **1**, p. 303, 1931—Puerto Rico east to Anegada Passage.

Cerchneis sparverius caribaearum Swann, Monog. Bds. Prey, **2**, p. 464, 1945 (monog.).

Range.—Puerto Rico and Virgin Islands, Greater Antilles and the whole chain of the Lesser Antilles from Anguilla to Grenada (rare on the southern islands, doubtfully recorded from Barbados).[1]

Field Museum Collection.—121: Puerto Rico (Mayaguez, 5; unspecified, 2); Virgin Islands (St. Croix, 8; Anegada, 7; Virgin Gorda, 23; Tortola, 2); Lesser Antilles (Anguilla, 3; St. Eustatius, 11; St. Christopher, 21; Antigua, 11; Guadeloupe, 12; Desirade, 3; Marie Galante, 3; Dominica, 2; Santa Lucia, 8).

***Falco sparverius brevipennis** (Berlepsch).[2] SHORT-WINGED SPARROW HAWK.

Tinnunculus sparverius brevipennis Berlepsch, Journ. Orn., **40**, p. 91, Jan., 1892—Curacao Island (type in coll. of H. von Berlepsch, now in Frankfort Museum); Hartert, Ibis, 1893, pp. 303, 321, 338—Aruba, Curacao, and Bonaire; idem, Nov. Zool., **9**, p. 304, 1902—same localities.

Tinnunculus sparverius subsp. *brevipennis* Salvadori and Festa, Boll. Mus. Zool. Torino, **14**, No. 339, p. 11, 1899—Curacao.

Falco sparverius brevipennis Cory, Field Mus. Nat. Hist., Orn. Ser., **1**, pp. 198, 205, 210, 253, 1909—Aruba, Curacao, and Bonaire; Peters, Bds. World, **1**, p. 303, 1931 (range).

Cerchneis sparveria brevipennis Cory, Field Mus. Nat. Hist., Orn. Ser., **1**, p. 332, 1915 (crit.).

[1] After studying a large series representing nearly every island from Puerto Rico to Santa Lucia, we are in complete agreement with Wetmore that *C. s. loquacula* (of Puerto Rico and the Virgin Islands) cannot be separated from the Lesser Antillean form. All of the alleged characters prove to be individual and not restricted to any particular island. As a matter of fact, the males with the most deeply colored breasts and the female with largest rufous crown patch are from Santa Lucia.

Additional specimens examined.—St. Thomas, 4; Virgin Gorda, 3; Anegada, 2; Anguilla, 2; St. Eustatius, 2; St. Kitts, 1; Antigua, 2; Montserrat, 4; Guadeloupe, 3; Dominica, 2; Santa Lucia, 6.

[2] *Falco sparverius brevipennis* (Berlepsch): Very similar to *F. s. ochraceus* but slightly smaller; back generally paler and more vinaceous, less rufous; breast paler, apparently never darker than pinkish cinnamon; black spotting on under wing coverts and on flanks much heavier. Wing, 160 (male) to 182 (female); tail, 115–130. Not one of the color characters holds in every individual, and even the pale breast, the most reliable feature of the race, is shown by a male (of the race *ochraceus*) from El Valle, Merida. In small size and light-colored breast *F. s. brevipennis* closely approaches *F. s. margaritensis* but may be immediately distinguished by having the sides of the upper belly coarsely spotted with black. From *F. s. caribaearum* it is easily separable by uniform or, if provided with black markings, spotted rather than barred back and tail, and lighter gray upper wing coverts with much fewer and smaller, if any, black spots.

Cerchneis isabellina brevipennis Swann, Syn. List Accip., p. 160, 1920 (range); idem, Syn. Accip., p. 229, 1922 (range).

Cerchneis sparverius brevipennis Swann, Monog. Bds. Prey, 2, p. 471, 1945 (monog.).

Range.—Islands of Aruba, Curacao and Bonaire, southern Caribbean Sea.

Field Museum Collection.—14: Dutch West Indies (Aruba, 4; Curacao, 10).

***Falco sparverius margaritensis** (Cory).[1] MARGARITA SPARROW HAWK.

Cerchneis sparverius margaritensis Cory, Field Mus. Nat. Hist., Orn. Ser., 1, p. 297, Feb. 23, 1915—Margarita Island, Venezuela (type in Field Museum of Natural History, Chicago); idem, l.c., p. 331, 1915—Margarita Island (crit.).

Falco sparverius Robinson and Richmond, Proc. U. S. Nat. Mus., 18, p. 661, 1895—Margarita Island; Phelps, Auk, 14, p. 366, 1897—San Antonio and Cumanacoa (Sucre), Venezuela; Clark, Auk, 19, p. 261, 1902—Margarita Island.

Cerchneis isabellina (not *Falco isabellinus* Swainson) Lowe, Ibis, 1907, p. 556—Margarita Island.

Falco sparverius isabellinus Cory, Field Mus. Nat. Hist., Orn. Ser., 1, pp. 241, 253, 1909—Margarita Island (crit.).

Cerchneis sparveria isabellina Chapman, Bull. Amer. Mus. N. H., 34, p. 373, 1915—part, San Antonio, Bermudez, Venezuela.

Falco sparverius margaritensis Peters, Bds. World, 1, p. 304, 1931—Margarita Island.

Cerchneis sparverius ochracea Swann, Monog. Bds. Prey, 2, p. 470, 1945—part, Margarita Island (monog.).

Range.—Northeastern Venezuela, in Dept. Sucre including Margarita Island.[2]

[1] *Falco sparverius margaritensis* (Cory): Very close to *F. s. ochraceus* but under parts paler, the color of the breast varying from pinkish cinnamon to pinkish buff, and the gray of the head in adult males clearer; females underneath paler, the breast washed with buffy rather than cinnamon and as a rule less heavily striped; size on average smaller.

This form is an intermediate to *F. s. isabellinus* and, though not possessed with any character of its own, yet it cannot well be united to either of its allies. Specimens with the darkest breast are inseparable from the palest *ochraceus*, while on the other hand the light-breasted birds are matched by various individuals from British Guiana. If the race is to be maintained it is quite evident that the Sparrow Hawks of northeastern Venezuela (Dept. Sucre) must go with *margaritensis*, since series from Margarita Island and Mount Turumiquire, in coloration as well as in size, vary exactly within the same limits, and do not show, one from another, any appreciable difference. Such an agreement is quite in accordance with our zoological knowledge of eastern Venezuela.

Additional material examined.—Venezuela: Margarita Island, 2.

[2] Whether any form of Sparrow Hawk occurs on the Island of Trinidad is an open question. Cavendish Taylor (Ibis, 1864, p. 80) reports "*Tinnunculus spar-*

Field Museum Collection.—12: Venezuela (Margarita Island, 6; Mount Turumiquire, Sucre, 6).

***Falco sparverius isabellinus** Swainson. ISABELLINE SPARROW HAWK.

Falco isabellinus Swainson, Anim. Menag., p. 281, Dec. 31, 1837—Demerara (type in British Museum examined).[1]

Falco sparverius (not of Linnaeus) Schomburgk, Reisen Brit. Guiana, **1**, p. 286, 1847—near Pirara.

Cerchneis sparverius Cabanis, in Schomburgk, Reisen Brit. Guiana, **3**, "1848," p. 734, 1849—savanna (near Pirara).

Tinnunculus sparverius var. Pelzeln, Verh. Zool. Bot. Ges. Wien, **13**, pp. 627, 634, 1863—Forte do Rio Branco, Brazil (soft parts); idem, Orn. Bras., **1**, p. 5, 1867—Forte do Rio Branco.

Cerchneis isabellina Sharpe, Cat. Bds. Brit. Mus., **1**, p. 441, 1874—part, spec. b–d, British Guiana; Chubb, Bds. Brit. Guiana, **1**, p. 279, 1916—Roraima, Upper Takutu Mountains, and Rupununi savannas.

Tinnunculus isabellinus Gurney, Ibis, 1881, p. 560—part, British Guiana (crit.); Salvin, Ibis, 1886, p. 76—Roraima.

Tinnunculus sparverius isabellinus Berlepsch, Ibis, 1884, p. 437—Angostura, Rio Orinoco, Venezuela; idem and Hartert, Nov. Zool., **9**, p. 114, 1902—Ciudad Bolivar, Altagracia, Caicara, Quiribana de Caicara, Rio Catanapa, Puerto Samoro, and Perico, Orinoco Valley, Venezuela; Berlepsch, l.c., **15**, p. 294, 1908—Cayenne, French Guiana.

Cerchneis sparveria distincta Cory, Field Mus. Nat. Hist., Orn. Ser., **1**, p. 297, Feb. 23, 1915—Bõa Vista, Rio Branco, Brazil (type in Field Museum of Natural History, Chicago, examined); idem, l.c., p. 330, 1915—Rio Branco (crit.); Pinto, Rev. Mus. Paul., **22**, p. 93, 1937 (ex Cory).

verius" as occasionally *seen* in Trinidad but much less common there than in the Antillean Islands. His collection, now in the British Museum, does not contain any specimens. Belcher and Smooker (Ibis, 1934, p. 595) claim *Falco sparverius sparverius* to be "resident in marshes and mangrove swamps," and ascribe a nest with four eggs found in the hole of an Immortelle tree near the Caroni Swamp (May 26!) to this purely North American Hawk. As no specimen has been secured, this extraordinary record cannot be accepted without more satisfactory evidence. Finsch (Proc. Zool. Soc. Lond., 1870, p. 556) lists a young female of *Falco sparverius*, but it is established that his "Trinidad" collection, at least in part, came from the Venezuelan mainland. Finally, Gurney's record (Ibis, 1881, p. 561) from Trinidad is too indefinite to be seriously considered. If some form of Sparrow Hawk occurs at all on the island, it is more likely to be *F. s. margaritensis* than any other.

[1] The type (No. 37.7.15.45) is an adult male with just two tiny reddish spots in the gray of the hind crown and wholly unspotted under parts, thus closely agreeing with Swainson's description. It was collected by Sir Robert Schomburgk in British Guiana. Sharpe (Cat. Bds. Brit. Mus., **1**, p. 442, 1874) lists it as specimen b. The two other Schomburgk specimens, both males with large rufous crown patches, correspond to the characterization of the "young male." No female from Schomburgk's collection is in the British Museum. Specimen 2, erroneously entered as "type of species," has no history.

Cerchneis sparveria perplexa Cory, Field Mus. Nat. Hist., Orn. Ser., **1**, p. 327, Aug. 7, 1915—lower Essequibo River, British Guiana (type in Field Museum of Natural History, examined).

Cerchneis sparveria isabellina Chapman, Bull. Amer. Mus. N. H., **34**, p. 373, 1915—part, British Guiana and Venezuela (Caicara, Orinoco, and Maripa, Caura) (crit.); Cory, Field Mus. Nat. Hist., Orn. Ser., **1**, p. 328, 1915—British Guiana (descr.); Cherrie, Sci. Bull., Mus. Brookl. Inst., **2**, p. 347, 1916—Orinoco Valley from the Delta region (Las Barrancas) to the falls of Maipures.

Cerchneis isabellina isabellina Swann, Syn. List Accip., p. 159, 1920—part, Guiana and Rio Branco (chars.); idem, Syn. Accip., p. 228, 1922 (in part).

Falco sparverius isabellinus Peters, Bds. World, **1**, p. 303, 1931—part, Cayenne.

Falco sparverius perplexus Peters, Bds. World, **1**, p. 304, 1931 (ex Cory).

Falco sparverius distinctus Peters, Bds. World, **1**, p. 304, 1931 (ex Cory).

Cerchneis sparverius isabellina Swann, Monog. Bds. Prey, **2**, p. 471, 1945—part, southern Venezuela, the Guianas and northern Brazil (monog.).

Range.—French, Dutch and British Guiana, southern Venezuela (Orinoco Valley and its tributaries), and the adjacent parts of Brazil (upper Rio Branco).[1]

Field Museum Collection.—12: British Guiana (Lower Rio Essequibo, 2); Brazil (Bõa Vista, Rio Branco, 7; Sierra da Lua, near Bõa Vista, Rio Branco, 3).

[1] Careful comparison of twenty-one Guianan (*isabellinus*) and sixteen Rio Branco (*distinctus*) specimens reveals their absolute identity. The gray of the crown in Brazilian birds is by no means paler. The white and dusky barring of the inner webs of remiges is subject to much individual variation. Two birds from the Rio Branco have the dark bars just as wide and continuous as in the majority from British Guiana, whereas a male each from Roraima and Quonga have even more white than any from Brazil. Dimensions in the two series are exactly the same, measuring, in adult males from British Guiana, wings 172–182, tails 118–130, in those from Brazil, 175–180 and 118–130, respectively. In both series of males, there are specimens with wholly gray crowns, some with a conspicuous rufous crown patch and others with just a few rufous spots in the middle.

Birds from the Caura and Orinoco valleys agree in every respect. With only one other bird from British Guiana for comparison, the late C. B. Cory based on a single male, supposed to be from the lower Essequibo, his *C. s. perplexa*, which in the light of the extensive series in the British Museum proves to be an individual variant of *F. s. isabellinus*. While the most deeply colored specimen in the whole lot (the breast being nearly tawny with a touch of orange-cinnamon), the type is closely approached by a male from the great Savannah Rupununi. From this latter the series examined shows an almost uninterrupted chain from darkest down to the lightest individuals (one each from Roraima and Quonga), which have a pinkish buff breast. Cory's example has the scapulars more strongly barred with black, but in this respect again it is very nearly matched by a male from Quonga, while the remaining specimens are either wholly unspotted or show various traces of such markings. In comparison to *margaritensis* and *ochraceus* the lighter gray crown is not an absolutely constant feature of the Guianan birds. The female of *perplexa*, spoken of by Cory, is absolutely indistinguishable from others of the same sex. The original label of the type bears no locality but Rodway subsequently informed the describer that it had been shot on the "lower Essequibo River." We venture to question the correctness of this statement, since the Isabelline Sparrow Hawk is reported by all competent observers,

***Falco sparverius ochraceus** (Cory).[1] OCHRACEOUS SPARROW HAWK.

Cerchneis sparverius ochracea Cory, Field Mus. Nat. Hist., Orn. Ser., **1**, p. 298, Feb. 23, 1915—Colon, Tachira, Venezuela (type in Field Museum of Natural History, examined); Chapman, Bull. Amer. Mus. N. H., **34**, p. 374, 1915—Eastern Andes of Colombia and western Venezuela (crit.); Cory, Field Mus. Nat. Hist., Orn. Ser., **1**, p. 326, 1915—western Venezuela and adjoining section of Colombia (crit.); Swann, Monog. Bds. Prey, **2**, p. 470, 1945—part, except Margarita Island (monog.).

Tinnunculus sparverius (not *Falco sparverius* Linnaeus) Sclater and Salvin, Proc. Zool. Soc. Lond., 1869, p. 252—Plain of Valencia, Venezuela; iidem, l.c., 1870, p. 782—Merida, Venezuela; Wyatt, Ibis, 1871, p. 382—Ocana, Santander, Colombia.

Cerchneis isabellina (not *Falco isabellinus* Swainson) Sharpe, Cat. Bds. Brit. Mus., **1**, p. 441, 1874—part, spec. e–l, Caracas, Venezuela.

Cerchneis cinnamomina (not *Falco cinnamominus* Swainson) Sharpe, Cat. Bds. Brit. Mus., **1**, p. 439, 1874—part, spec. o–s, Bogotá, New Granada.

Cerchneis sparveria intermedia Cory, Field Mus. Nat. Hist., Orn. Ser., **1**, p. 325, Aug. 7, 1915—Villavicencio, base of Eastern Andes, Colombia

such as Schomburgk, Quelch and McConnell, to be confined to the open grasslands, and has never been found by anybody else in the wooded districts near the coast.

Additional material examined.—British Guiana: Roraima, 5; Quonga, 3; Great Savannah Rupununi, 2; Upper Takutu Mountains, 3; unspecified, 6.—Brazil: Forte do Rio Branco, 4.—Venezuela: Caura Valley, 2; Angostura, Orinoco, 2.

[1] *Falco sparverius ochraceus* (Cory) differs from *F. s. isabellinus* by somewhat longer wings and more richly colored under parts, the breast and upper abdomen varying from cinnamon to orange-cinnamon (instead of from pinkish buff to dark pinkish cinnamon), this color passing, on tibial feathers and under tail coverts, into pinkish buff rather than buffy-white. Besides, the more blackish barring across the inner webs of the remiges is wider and extends to the edge of the feathers; the black subterminal band on the lateral rectrices is broader; the gray of the crown in adult males is rather darker, and the females are much more heavily streaked underneath.

A very satisfactory series of twenty adult males from the Cordillera of Merida admirably illustrates the individual variation of this form. The great majority are easily recognizable by much darker under parts and larger size, but two or three unusually small specimens with rather light cinnamon breasts are separated only with difficulty from certain dark-breasted individuals from British Guiana (*isabellinus*). In the Caracas region there seems to be a tendency to smaller size and paler coloration, thus verging to *margaritensis*, though one male is just as deeply orange-cinnamon on the breast as any from the Merida region.

Birds from the Eastern Andes of Colombia (*intermedia*) average very slightly larger, but do not differ in coloration, the alleged divergency in the width of the black subterminal tail-band proving to be non-existent.

The wings of adult males measure from 176 to 192 in the Merida region of Venezuela; from 168–178 in the Caracas region and from 184 to 190 in the East Colombian Andes. A single male from the Plain of Valencia, Carabobo, is smaller (wing 172) but extremely typical in coloration (breast deep cinnamon).

Additional material examined.—Colombia: El Piñon, Bogotá region, 3; Anolaima, 3; Fusugasuga, 2; "Bogotá," 7.—Venezuela: Merida region (El Valle, Escorial, Merida), 28; Silla de Caracas, 1; Caracas, 7; Plain of Valencia, Carabobo, 1.

(type in the American Museum of Natural History, New York); Chapman, Bull. Amer. Mus. N. H., **36**, p. 251, 1917—part, Rio Toche, Honda, Andalucia, Fusugasuga, El Piñon, La Herrera, La Olanda, Tena, Anolaima, Caqueza, Villavicencio and Barrigon, Colombia.

Cerchneis isabellina ochracea Swann, Syn. List Accip., p. 160, 1920—part, Merida region of Venezuela and eastern Andes of Colombia (crit.; range); idem, Auk, **38**, p. 364, 1921—Merida region; idem, Syn. Accip., p. 229, 1922—part, Merida region and eastern Colombia (crit.).

Falco sparverius intermedius Peters, Bds. World, **1**, p. 304, 1931—Colombia.

Falco sparverius ochraceus Peters, Bds. World, **1**, p. 304, 1931—Venezuela.

Cerchneis sparverius intermedia Swann, Monog. Bds. Prey, **2**, p. 470, 1945 (monog.).

Falco sparverius ochracea Nicéforo, Caldasia, **3**, No. 14, p. 370, 1945—Colombia (Paramo de Tama; Cucuta; Gramalote).

Range.—Mountains of northwestern Venezuela (east to the Caracas region) and eastern Colombia (eastern slope of Central and Eastern Andes).[1]

Field Museum Collection.—13: Colombia (Cartagena, Bolivar, 1; Fundacion, Santa Marta, 1; La Holanda, Cundinamarca, 1; Paramo de Tama, Santander, 2; Villavicencio, Meta, 3); Venezuela (El Valle, Merida, 2; Rio Mucujon, Merida, 1; Colon, Tachira, 2).

*Falco sparverius caucae (Chapman).[2] CAUCA SPARROW HAWK.

Cerchneis sparverius caucae Chapman, Bull. Amer. Mus. N. H., **34**, p. 375, May 24, 1915—La Manuelita (near Palmira), Cauca Valley, Colombia

[1] A probably undescribed race occurs in northern Colombia from Cartagena to the Santa Marta region. It is much smaller than *F. s. ochraceus*, being about the size of *F. s. margaritensis*. The males resemble the latter in coloration except in having the breast, particularly on the sides, profusely marked with large blackish spots, while the females are as heavily streaked underneath as those of *ochraceus*. The few available specimens (a pair each from Valencia and Manaure) run, however, so close to *F. s. brevipennis*, of the Dutch West Indies, that we are reluctant to formally propose a name for this form, the synonymy of which is given below. Measurements of wings: Males, 172, 175; females, 175, 182.

Tinnunculus sparverius (not *Falco sparverius* Linnaeus) Salvin and Godman, Ibis, 1879, p. 206—Manaure; iidem, Ibis, 1880, p. 177—Valencia; Gurney, Ibis, 1881, pp. 548, 553—Manaure (crit.).

Falco sparverius Bangs, Proc. Biol. Soc. Wash., **12**, p. 172, 1898—Palomina and San Miguel, Santa Marta.

Cerchneis sparveria subsp. Chapman, Bull. Amer. Mus. N. H., **36**, p. 252, 1917—part, Turbaco, Colombia.

Falco sparverius isabellinus Todd and Carriker, Ann. Carnegie Mus., **14**, p. 162, 1922—Macotama, La Concepción, Taquina, Mamatoco, San Miguel, Fundación and Pueblo Viejo, Santa Marta; Darlington, Bull. Mus. Comp. Zool., **71**, p. 368, 1931—Cienaga to Aracataca, Rio Frio, Colombia.

[2] *Falco sparverius caucae* (Chapman): Agrees with *F. s. ochraceus* in richly colored under parts but sides, in the male sex, conspicuously spotted with black and crown of head blacker, dark neutral gray to dusky neutral gray instead of

(type in the American Museum of Natural History, New York); Cory, Field Mus. Nat. Hist., Orn. Ser., 1, p. 321, 1915—western Colombia (La Manuelita, Cali, La Florida, Noanama) (crit.); Chapman, Bull. Amer. Mus. N. H., 36, p. 251, 1917—Cali, Popayan, La Florida, La Manuelita, Miraflores and Laguneta, Colombia; Swann, Monog. Bds. Prey, 2, p. 469, 1945 (monog.).

Tinnunculus sparverius (not *Falco sparverius* Linnaeus) Sclater and Salvin, Proc. Zool. Soc. Lond., 1879, p. 541—Envigado, Concordia, Medellin, and Santa Elena, Colombia (eggs descr.).

Cerchneis isabellina (not *Falco isabellinus* Swainson) Piguet, Mem. Soc. Neu. Sci. Nat., 5, p. 806, 1914—Medellin.

Cerchneis sparveria intermedia (not of Cory) Chapman, Bull. Amer. Mus. N. H., 36, p. 251, 1917—part, La Frijolera and Barro Blanco, Cauca.

Cerchneis sparveria subsp. Chapman, Bull. Amer. Mus. N. H., 36, p. 252, 1917—part, Noanama, Colombia.

Falco sparverius caucae Peters, Bds. World, 1, p. 304, 1931—Cauca Valley.

Cerchneis cinnamominus equatorialis (not *Falco sparverius aequatorialis* Mearns) Swann, Syn. List Accip., p. 158, 1920—part, Colombia; idem, Syn. Accip., p. 227, 1922—part, Colombia.

Range.—Western Colombia in the mountains bordering the Cauca Valley.

Field Museum Collection.—10: Colombia (El Tambo, Munchique, Cauca, 10).

***Falco sparverius aequatorialis** Mearns. ECUADORIAN SPARROW HAWK.

neutral gray to deep neutral gray; females distinguishable only by the somewhat darker gray crown. Wing, 185–193, (female) 185–198; tail, 125–138.

Compared to birds from the Eastern Andes of Colombia (*ochraceus*) this form is fairly distinct, though occasional specimens, such as a male from La Holanda, may have the flanks just as strongly spotted with blackish as *caucae*. While Chapman identified single examples from the lower Cauca as "*intermedia*," a series from the Medellin region, including several adult males with heavily spotted flanks and dark neutral crown, are unquestionably referable to the present form. On the other hand, we are very doubtful if *F. s. caucae* can be separated from *F. s. aequatorialis*, and we fail to find any character by which to distinguish the two admittedly small series from western Colombia and Ecuador. There is hardly any difference in size (see measurements), while both lots comprise males with heavily spotted and others with faintly marked flanks. The head, in three or four Ecuadorian skins, is somewhat lighter, but the others are fully as dark-capped as any from Colombia. Yet we should like to see a larger series before relegating *caucae* to the synonymy of *aequatorialis*.

Measurements.—Adult males (*caucae*), wing, 182, 185, 188, 193, 193; tail, 128, 130, 135, 130. (*aequatorialis*), wing, 190, 190, 190, 194, 195, 195, 200; tail, 134, 135, 135, 136, 140, 140, 142.—Adult females (*caucae*), wing, 182, 185, 190, 192, 196, 198; tail, 125, 126, 135, 135, 136, 138. (*aequatorialis*), wing, 195, 196, 197, 200; tail, 133, 135, 140.

Additional material examined.—Colombia: Atuncela, Western Andes, 2; Lomitas, 2; vicinity of Pasto, 1; Envigado, 2; Concordia, 4; Medellin, 1.

Falco sparverius aequatorialis Mearns, Auk, **9**, p. 269, July, 1892—"Guayaquil," Ecuador[1] (type in U. S. National Museum); Peters, Bds. World, **1**, p. 304, 1931 (range).

Tinnunculus sparverius (not *Falco sparverius* Linnaeus) Sclater, Proc. Zool. Soc. Lond., **26**, p. 556, 1858—Matos; idem, l.c., **27**, p. 147, 1859—Pallatanga; idem, l.c., **28**, p. 96, 1860—Calacali and Puellaro; Goodfellow, Ibis, 1902, p. 222—Quito.

Cerchneis cinnamomina (not *Falco cinnamominus* Swainson) Taczanowski and Berlepsch, Proc. Zool. Soc. Lond., 1885, p. 110—Riobamba and Chimborazo.

Tinnunculus sparverius cinnamominus Hartert, Nov. Zool., **5**, p. 501, 1898—Cayambe; Ménégaux, Miss. Serv. Geog. Armée Mes. Arc. Mérid. Equat., **9**, p. B. 13, 1911—Mozo, Pichincha.

Tinnunculus cinnamominus Salvadori and Festa, Boll. Mus. Zool. Torino, **15**, No. 368, p. 31, 1900—part, El Troje (Huaca), Ibarra and La Concepción (Chota Valley).

Cerchneis sparverius aequatorialis Chapman, Bull. Amer. Mus. N. H., **34**, p. 376, 1915—Ecuador (crit.); Cory, Field Mus. Nat. Hist., Orn. Ser., **1**, p. 322, 1915—Ecuador (crit. note on type); Chapman, Bull. Amer. Mus. N. H., **55**, p. 240, 1926—Chanchan, Chiquancay, Huigra, near Chunchi, Riobamba, Cumbaya, below Chambo, Chimborazo, Urbina, Pomasqui, Pintag, Yaguarcocha, near Quito, Pichincha, Gualea, Mindo and Pallatanga (crit.); Swann, Monog. Bds. Prey, **2**, p. 469, 1945 (monog.).

Cerchneis sparveria andina Cory, Field Mus. Nat. Hist., Orn. Ser., **1**, p. 323, Aug. 7, 1915—Quito, Ecuador (type in the American Museum of Natural History, New York).

Cerchneis cinnamominus equatorialis Swann, Syn. List Accip., p. 158, 1920—part, Ecuador; idem, Syn. Accip., p. 227, 1922—part, Ecuador.

Falco sparverius cinnamominus Berlioz, Bull. Mus. Hist. Nat. Paris, **33**, Tingo and Aluguincho, p. 356, 1927—Val de Tumbaco, Val de San Pedro.

Range.—Subtropical and Temperate zones of Ecuador north of the Chanchan Valley.[2]

Field Museum Collection.—8: Ecuador (Alto Turubamba, Pichincha, 1; Cerro Tanlagua, Pichincha, 2; San Antonio, Pichincha, 1; Valle de Zambeza, Pichincha, 1; Cerro Chimborazo, Chimborazo, 2; Ambato, Tunguragua, 1).

[1] As pointed out by Chapman (Bull. Amer. Mus. N. H., **34**, p. 377, 1915; l.c., **55**, p. 241, 1926) the original locality is incorrect and the type undoubtedly came from the interior tableland of Ecuador. No kestrel is found in the Tropical zone about Guayaquil. Measurements (adult male): wing, 197; tail, 137 (teste Chapman).

[2] It is now an established fact that only one form of Sparrow Hawk exists in Ecuador north of the Chanchan River. As we have explained in a footnote to *F. s. caucae*, it varies just as much individually as do all the other races.

Additional material examined.—Ecuador: Carapungo, 1; Pomasqui, 1; Pichincha, 4; unspecified, 4.

***Falco sparverius peruvianus** (Cory).[1] PERUVIAN SPARROW HAWK.

Cerchneis sparveria peruviana Cory, Field Mus. Nat. Hist., Orn. Ser., **1**, p. 296, 1915—Chachapoyas, Peru (type in Field Museum of Natural History, examined); idem, l.c., p. 319, Aug., 1915—part, Peru (Chachapoyas, Macate, Menocucho, Mirador, Hacienda Limón, Cajamarca, Lima) (crit.); Chapman, Bull. Amer. Mus. N. H., **55**, p. 242, 1926—La Chonta, Santa Rosa, Casanga, Guainche, Celica, and Alamor, Ecuador (crit.).

Falco sparverius (not of Linnaeus) Tschudi, Unters. Faun. Peru., Orn., p. 110, 1846—from the seacoast to the high Cordilleras.

Tinnunculus sparverius Sclater and Salvin, Proc. Zool. Soc. Lond., 1867, p. 988—Arequipa, Peru; iidem, l.c., 1868, p. 176—Tambo Valley, Arequipa, Peru; iidem, l.c., p. 569—Arequipa, Peru.

Cerchneis cinnamomina (not *Falco cinnamominus* Swainson) Sharpe, Cat. Bds. Brit. Mus., **1**, p. 439, 1874—part, spec. l–n, Tambo Valley, Peru; Taczanowski, Orn. Per., **1**, p. 154, 1884—Peru.

Tinnunculus cinnamominus Taczanowski, Proc. Zool. Soc. Lond., 1874, p. 550—Lima, Huanta, and Palcamayo, Peru; idem, l.c., 1879, p. 242—Chota, Peru; Salvin, l.c., 1883, p. 427—part, Payta, Peru; Salvadori and Festa, Boll. Mus. Zool. Torino, **15**, No. 368, p. 31, 1900—part, San Bartolome (Azuay) and Canar, Ecuador.

Tinnunculus sparverius cinnamominus Berlepsch and Stolzmann, Proc. Zool. Soc. Lond., 1892, p. 388—Lima and Ica, Peru; iidem, l.c., 1902, (2), p. 43—Palcamayo, Peru.

Cerchneis sparverius caucae (not of Chapman) Bangs and Noble, Auk, **35**, p. 445, 1918—Sullana, Piura, Peru.

Cerchneis cinnamominus aequatorialis (not of Mearns) Chubb, Ibis, 1919, p. 290—part, Ecuador (Canar) and Peru (Piura, Carohas, Arequipa).

Cerchneis sparveria peruviana Zimmer, Field Mus. Nat. Hist., Zool. Ser., **17**, p. 248, 1930—Huánuco, mountains near Huánuco, Vista Alegre and Cullcui (Rio Marañon), Peru (crit.); Hellmayr, l.c., **19**, p. 285, 1932—Chacalluta, Tacna, Chile; Philippi, El Hornero, **6**, p. 232, 1936—Lluta,

[1] *Falco sparverius peruvianus* (Cory), an extremely variable form, is hard to characterize. While easily distinguishable from *F. s. aequatorialis* in the male sex by much paler, warm buff to ochraceous, instead of deep tawny, and much more spotted breast, as well as much lighter, pale buff instead of deep cinnamon-buff, posterior under parts, it is rather difficult to separate from *F. s. cinnamominus*, although the reduction or even absence of the black barring on the back, the slightly wider black subterminal band of the rectrices, and the generally smaller size will serve to identify the males, at least in most cases. The difference in size does not hold in the females, which are, however, as a rule brighter rufous above and have more white on the forehead. Birds from southern Ecuador (Maravina) are exactly like the Peruvian series. Some individuals from extreme southwestern Peru (Arequipa), like a single female from Tacna, are fully as large as *cinnamominus*.

Measurements.—Adult males: wing, 175–185, (Arequipa) 189. Adult females: wing, 185–198, (Tacna) 200.

Additional material examined.—Ecuador: Maravina, 3; Canar, 2.—Peru: Payta, 2; Piura, 1; Carohas, Ancachs, 1; Vina, Huamachuco, 2; Malca, Cajabamba, 2; Lima, 2; Changay, Lima, 2; Chorillos, Lima, 1; Tambo Valley, Arequipa, 2; Arequipa, 2.

Tacna, Chile; idem, Bol. Mus. Nac. Santiago, **16**, p. 49, 1938—Chinchorro, Tacna, Chile.

Falco sparverius peruvianus Peters, Bds. World, **1**, p. 305, 1931 (range).

Cerchneis sparverius peruviana Swann, Monog. Bds. Prey, **2**, p. 468, 1945 (monog.).

Range.—Subtropical and Temperate zones of southwestern Ecuador (south of the Chanchan Valley), Peru (excepting the extreme southeastern section) and extreme northern Chile (Tacna Province).

Field Museum Collection.—25: Ecuador (El Tambo, Canar, 1; Yana Urcu, Azuay, 3; Giran, Azuay, 1; Cajanuma, Loja, 1); Peru (Hacienda Limón, northeast of Balsas, Amazonas, 1; Chachapoyas, Amazonas, 1; Menocucho, Libertad, 1; Macate, Ancachs, 5; Mirador, Ancachs, 2; Cullcui, Huánuco, 2; Huánuco, Huánuco, 3; Vista Alegre, Huánuco, 1; Huánuco Mountains, 1; Cajamarca, 1); Chile (Chacalluta, Tacna, 1).

Falco sparverius fernandensis (Chapman).[1] JUAN FERNANDEZ SPARROW HAWK.

Cerchneis sparverius fernandensis Chapman, Bull. Amer. Mus. N. H., **34**, p. 379, Mar. 27, 1915—Mas A Tierra Island, Juan Fernandez Group, Chile (type in Brewster-Sanford Collection, the American Museum of Natural History, New York); Cory, Field Mus. Nat. Hist., Orn. Ser., **1**, p. 316, 1915—Juan Fernandez Islands (crit.); Lönnberg, in Skottsberg, Nat. Hist. Juan Fernandez, **3**, p. 9, 1921—Mas A Tierra (crit.); Swann, Monog. Bds. Prey, **2**, p. 467, 1945 (monog.).

Falco sparverius (not of Linnaeus) Philippi, Anal. Univ. Chile, **31**, p. 244, 1868—part, Juan Fernandez.

Falco cinnamominus (not of Swainson) Philippi, Anal. Univ. Chile, **31**, p. 244, 1868—Juan Fernandez.

Tinnunculus sparverius Reed, Ibis, 1874, pp. 82, 83—Mas A Tierra (crit.).

Tinnunculus cinnamominus Johow, Est. Flora Fauna Isl. Juan Fernandez, p. 237, 1896—Mas A Tierra.

[1] *Falco sparverius fernandensis* (Chapman): Very close to *F. s. cinnamominus* and in the male sex not distinguishable with certainty, though the under parts, as a rule, are more strongly washed with cinnamon-buff, deepening to cinnamon on the chest, and more heavily spotted with black, especially laterally; females decidedly duller above with the bars dusky rather than blackish, hence less pronounced, and much more deeply colored underneath, cinnamon-buff rather than buffy whitish, with the dark pectoral markings much coarser and developing into broad transverse bars on the flanks. Wing, 190–192, (female) 195–200 mm.

Eight specimens from Mas A Tierra show this insular race to be extremely variable. The upper parts of the males vary from nearly unspotted to heavily barred, exactly as in a very large series of the Chilean form, while in intensity and amount of spotting underneath the island birds can be matched by occasional individuals from the continent. The females, however, are readily separated by the characters given above.

Cerchneis cinnamomina fernandensis Swann, Syn. List Accip., p. 159, 1920 (chars.); idem, Syn. Accip., p. 227, 1922 (chars.).

Falco sparverius fernandensis Peters, Bds. World, **1**, p. 305, 1931 (range); (?)Brandt, Auk, **55**, p. 288, 1938—Santiago, Chile (one specimen, taken June 12).

Range.—Island of Mas A Tierra, Juan Fernandez Islands, off the coast of Chile.

***Falco sparverius cinnamominus** Swainson. CINNAMOMEOUS SPARROW HAWK.

Falco cinnamominus Swainson, Anim. Menag., p. 281, Dec. 31, 1837—Chile (type in coll. of W. J. Hooker, now in Liverpool Museum); Des Murs, in Gay, Hist. Fis. Pol. Chile, Zool., **1**, p. 226, 1847—Valparaiso, Chile.

Falco sparverius (not of Linnaeus) King, Zool. Journ., **3**, p. 425, 1827—Port Famine, Tierra del Fuego; d'Orbigny, Voy. Amér. Mérid., Ois., p. 119, 1836—part, Corrientes, Entre Rios, Santa Fe, Buenos Aires (south to the Rio Negro), Bolivia, and Chile; Des Murs, in Gay, Hist. Fis. Pol. Chile, Zool., **1**, p. 227, 1837—Chile; Burmeister, Reise La Plata St., **2**, p. 437, 1861—Argentina (Mendoza, Tucumán, etc.); Philippi, Anal. Univ. Chile, **31**, p. 244, 1868—part, Santiago, Valdivia and Magallanes; Doering, Period. Zool., **1**, p. 247, 1874—Barráncas, Rio Guayquiraro, Corrientes; Barrows, Auk, **1**, p. 110, 1884—Entre Rios (Concepción del Uruguay) and Buenos Aires (Bahia Blanca, Sierra de Carhue); Burmeister, Anal. Mus. Nac. Buenos Aires, **3**, p. 316, 1888—Rio Chico del Chubut.

Tinnunculus sparverius Darwin, Zool. Beagle, **3**, Birds, p. 29, 1839—Patagonia (Rio Negro and Santa Cruz); Fraser, Proc. Zool. Soc. Lond., **11**, p. 109, 1843—Chile; Pelzeln, Reise Nov., Zool., **1**, p. 8, 1865—Chile; Sclater, Proc. Zool. Soc. Lond., 1867, pp. 330, 338—Chile; Sclater and Salvin, Ibis, 1868, p. 188—Sandy Point, Magellan Straits; iidem, Proc. Zool. Soc. Lond., 1868, p. 143—Conchitas, Buenos Aires; iidem, l.c., 1869, p. 155—Tinta, Dept. Cuzco, Peru; iidem, Ibis, 1870, p. 499—Coquimbo, Chile; Hudson, Proc. Zool. Soc. Lond., 1872, p. 536—Rio Negro, Patagonia; Lee, Ibis, 1873, pp. 131, 135—Cordoba (between Frayle Muerto and Saladillo) and Entre Rios (Arroyo del Gato); Sclater and Salvin, Proc. Zool. Soc. Lond., 1876, p. 17—Maranura and Potrero, Urubamba, Peru; Durnford, Ibis, 1877, pp. 39, 188—Chubut (Valle del Chubut, Punta Ninfas) and Buenos Aires (Baradero); idem, Ibis, 1878, p. 398—Chubut; Sclater and Salvin, Proc. Zool. Soc. Lond., 1878, p. 434—Sandy Point and Elizabeth Island, Magellan Straits; Gibson, Ibis, 1879, p. 412—Cape San Antonio, Buenos Aires; Salvin, Ibis, 1880, p. 362—Salta; White, Proc. Zool. Soc. Lond., 1882, p. 623—Fuerte de Andalgala and Pilciao, Catamarca.

Tinnunculus sparverius var. *cinnamominus* Ridgway, Proc. Acad. Nat. Sci. Phila., 1870, p. 149 (crit.); Oustalet, Miss. Sci. Cap Horn, **6**, p. B. 37, 1891—Punta Arenas, Agua Fresca, Straits of Magellan and Ushuaia, Tierra del Fuego; Arribálzaga, Anal. Mus. Nac. Buenos Aires, **8**, p. 162, 1902—Lago General Paz, Chubut.

Cerchneis cinnamomina Sharpe, Cat. Bds. Brit. Mus., **1**, p. 439, 1874—part, spec. b–d, Straits of Magellan, Valparaiso and Patagonia; idem, l.c., 1881, p. 10—Coquimbo, Chile; Holmberg, Act. Acad. Nac. Cordoba, **5**, p. 76, 1884—Buenos Aires (route from Ayacucho to Tandil and from Tandil to La Tinta); Lillo, Anal. Mus. Nac. Buenos Aires, **8**, p. 205, 1902—Tucumán; Baer, Ornis, **12**, p. 229, 1904—Santa Ana and Tapia, Tucumán; Bruch, Rev. Mus. La Plata, **11**, p. 251, 1904—Oran, Salta; Lillo, Rev. Letr. Cienc. Soc., **3**, No. 13, p. 63, 1905—Tucumán; Scott and Sharpe, Rep. Princet. Univ. Exped. Patag., **2**, Orn., p. 667, 1915—Arroyo Eke (=Arroyo Gio), Punta Arenas, Rio Chico de Cruz, and Canydon, Santa Cruz; Giacomelli, El Hornero, **3**, p. 78, 1923—La Rioja; Bennett, Ibis, 1926, p. 330—near Port Stanley, Falkland Islands.

Tinnunculus cinnamominus Salvin, Proc. Zool. Soc. Lond., 1883, p. 427—part, Chile; Dalgleish, Proc. Roy. Phys. Soc. Edin., **8**, p. 78, 1884—Tala, Durazno, Uruguay (eggs descr.); Withington, Ibis, 1888, p. 470—Lomas de Zamora, Buenos Aires; Dalgleish, Proc. Roy. Phys. Soc. Edin., **10**, p. 84, 1889—Ytanu, Paraguay; Sclater and Hudson, Arg. Orn., **2**, p. 69, 1889 (habits); Holland, Ibis, 1890, p. 425—Espartillar, Buenos Aires; Frenzel, Journ. Orn., **39**, p. 114, 1891—Cordoba; Kerr, Ibis, 1892, p. 141—lower Pilcomayo; Holland, l.c., 1892, p. 204—Espartillar, Buenos Aires; Aplin, l.c., 1894, p. 195—Uruguay (Rio Negro, Las Coronas); Koslowsky, Rev. Mus. La Plata, **6**, p. 284, 1895—Chilecito, La Rioja; Salvadori, Boll. Mus. Zool. Torino, **10**, No. 208, p. 20, 1895—Paraguay (Ayos, Valenzuela, Villa Rica) and Salta (Santa Rosa); idem, l.c., **12**, No. 292, p. 30, 1897—Bolivia (Aguairenda, Caiza) and Jujuy (San Lorenzo); Lane, Ibis, 1897, p. 180—Arauco, Rio Bueno (Valdivia) and Llanquihue, Chile; Gosse, in Fitz Gerald, The Highest Andes, p. 350, 1899—Lujon, Mendoza; Salvadori, Ann. Mus. Civ. Stor. Nat. Genova, **40**, p. 615, 1900—Penguin Rookery (Staten Island) and Gregory Bay; Dabbene, Anal. Mus. Nac. Buenos Aires, **8**, p. 356, 1902—Ushuaia, Tierra del Fuego; Lönnberg, Ibis, 1903, pp. 453, 465—San Luis and Tatarenda, Tarija, Bolivia; Berlepsch and Stolzmann, Ornis, **13**, pp. 100, 125, 1906—Santa Ana (Urubamba) and Quiquijana (Marcapata), Peru; Crawshay, Bds. Tierra del Fuego, p. 19, 1907—Cheena Creek and Rio McClelland Settlement; Grant, Ibis, 1911, p. 332—Los Ingleses, Ajo, Buenos Aires; Gibson, Ibis, 1919, p. 510—Cape San Antonio, Buenos Aires; Bullock, Rev. Chil. Hist. Nat., **33**, pp. 127, 198, 1933—Nahuelbuta and Angol, Malleco, Chile.

Falco sparverius cinnamominus Allen, Bull. Amer. Mus. N. H., **2**, p. 105, 1889—Yungas, Bolivia; Ridgway, Proc. U. S. Nat. Mus., **12**, p. 136, 1889—Sandy Point, Straits of Magellan; Mearns, Auk, **9**, p. 268, 1892 (crit.); Peters, Bds. World, **1**, p. 305, 1931 (range).

Cerchneis sparveria cinnamomina Schalow, Zool. Jahrb., Suppl., **4**, p. 694, 1898—Santiago de Chile, Punta Arenas and Seneril Bay, Cape Horn; Chapman, Bull. Amer. Mus. N. H., **34**, p. 378, 1915—Corral, Santiago, Cautin, Valdivia and Ancud, Chile (crit.); Cory, Field Mus. Nat. Hist., Orn. Ser., **1**, p. 315, 1915—Chile and Argentina (crit.); Barros, Rev. Chil. Hist. Nat., **24**, p. 49, 1920—Nilahue, Curico, Chile; idem, l.c., **25**, p. 176, 1921—Precordillera of Aconcagua, Chile; Paessler, Journ. Orn., **70**, p. 448,

1922—Coronel, Chile; Peters, Bull. Mus. Comp. Zool., **65**, p. 306, 1923—western Rio Negro (Maquinchao, Huanuluan, Paso Flores, Lake Nahuel Huapi); Wetmore, Bull. U. S. Nat. Mus., **133**, p. 101, 1926—Las Palmas, Chaco, and San Vicente, Uruguay (crit.); idem, Univ. Calif. Pub. Zool., **24**, p. 421, 1926—Bariloche, Rio Negro and Rio Fetaleufu, Chubut; Barros, Rev. Chil. Hist. Nat., **33**, p. 358, 1929—Aconcagua, Chile; Laubmann, Wiss. Erg. Deuts. Gran Chaco Exp., Vögel, p. 95, 1930—Formosa (Lapango, San José, Yunca Viejo, Mision Tacaagle), Santa Fe (Est. La Germania) and Bolivia (Villa Montes, Tarija); Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **19**, p. 284, 1932—Chile, from Atacama to the Straits of Magellan; Laubmann, Verh. Orn. Ges. Bay., **20**, p. 286, 1934—La Geraldina, Santa Fe (crit.; meas.); Steullet and Deautier, Obr. Cinc. Mus. La Plata, **1**, p. 487, 1936—Argentina (crit.; range; bibliog.).

Cerchneis sparverius australis (not *Tinnunculus sparverius* var. *australis* Ridgway) Hartert and Venturi, Nov. Zool., **16**, p. 240, 1909—Buenos Aires (Bahia Blanca) and Tucumán (Tucumán, Villa Nougues); Dabbene, Anal. Mus. Nac. Buenos Aires, **23**, p. 289, 1912—Villa Rica, Paraguay; idem, El Hornero, **1**, p. 95, 1918—Isla Martin Garcia, Buenos Aires; Sanzin, l.c., p. 149, 1918—Jocoli, Mendoza; Ambrosetti, l.c., p. 288, 1919—Timote, Buenos Aires (habits); Tremoleras, l.c., **2**, p. 17, 1920—Uruguay (Flores, Maldonado, Minas, Florida, Durazno, Treinta y Tres, Rocha, Cerro Largo); Serie and Smyth, l.c., **3**, p. 44, 1923—Santa Elena, Entre Rios; Pereyra, l.c., p. 165, 1923—Zelaya, Buenos Aires; Marelli, Mem. Min. Obr. Publ. for 1922–23, p. 631, 1924—Prov. Buenos Aires; Wilson, El Hornero, **3**, p. 356, 1926—Venado Tuerto, Santa Fe; Budin, l.c., **4**, p. 407, 1931—Maimara, Jujuy; Castellanos, l.c., **5**, p. 13, 1932—Valle de los Reartes, Cordoba.

Tinnunculus sparverius australis Dabbene, Anal. Mus. Nac. Buenos Aires, **18**, p. 250, 1910 (range in Argentina); Bertoni, Faun. Parag., p. 43, 1914—Alto Parana, Paraguay; Reed, Av. Prov. Mendoza, p. 22, 1916—Mendoza; Marelli, El Hornero, **1**, p. 77, 1918—Curuzu-Cuatia, Corrientes; Ménégaux, Rev. Franç. d'Orn., 1918, p. 290—Villa Lutetia, near San Ignacio, Misiones; idem, l.c., 1925, p. 286—near Icano, Santiago del Estero; Pereyra, El Hornero, **4**, p. 29, 1927—Conhelo, Pampa.

Cerchneis australis Chubb, Ibis, 1910, p. 74—Sapucay, Paraguay.

Cerchneis cinnamominus aequatorialis (not *Falco sparverius aequatorialis* Mearns) Chubb, Ibis, 1919, p. 290—part, Parotani and Charuplaya, Bolivia.

Cerchneis cinnamomina(us) cinnamomina(us) Swann, Syn. List Accip., p. 157, 1920 (range); idem, Syn. Accip., p. 226, 1922 (range); Friedmann, Bull. Mus. Comp. Zool., **68**, p. 157, 1927—Santa Elena, Entre Rios and Concepción, Tucumán.

Cerchneis sparveria subsp. Chapman, Bull. U. S. Nat. Mus., **117**, p. 60, 1921—Peru (Santa Ana, Toronto, Ollantaytambo, Chospiyoc, Ttica-Ttica, Calca, Cuzco).

Cerchneis sparverius cinnamomina Swann, Monog. Bds. Prey, **2**, p. 466, 1945 (monog.).

Range.—Western and southern South America from southeastern Peru (Cuzco region)[1] south through Bolivia, Paraguay, Uruguay, Chile (except Tacna) and Argentina to the Straits of Magellan and Tierra del Fuego; accidental on the Falkland Islands.[2]

Field Museum Collection.—62: Peru (Puno, Puno, 2); Bolivia (Vacas, Cochabamba, 4; Cuchicauchi, Cochabamba, 6; Tiraque, Cochabamba, 3; Colomi, Cochabamba, 3; Cercado, Santa Cruz, 1; Taruma, Santa Cruz, 1; Buena Vista, Santa Cruz, 2; Bermejo, Santa Cruz, 1; Samaipata, Santa Cruz, 1; Comarapa, Santa Cruz, 1); Chile (Caldera, Atacama, 1; Romero, Coquimbo, 2; Volcan de Maipo, Santiago, 1; Gualletue Lake, Cautin, 1; Ramadillo, Copiapo Valley, 1; Mafil, Valdivia, 3; Rinihue, Valdivia, 1; Sierra Nahuelbuta, Malleco, 1; Puerto Montt, 1; Nirehuao, 1); Paraguay (265 km. west of Puerto Casado, 1; Horqueta, 3; Serra de Amambay, 3; 40 km. west of Puerto Casado, 1); Argentina (Concepción, Tucumán, 4; Tucumán, 1; Noetinger, Cordoba, 3; Eldorado, Misiones, 1; Puerto Segundo, Misiones, 1; Bonafacio, Buenos Aires, 3; Rivadavia, Chubut, 1; Lago Fagnano, Tierra del Fuego, 2).

***Falco sparverius cearae** (Cory).[3] BRAZILIAN SPARROW HAWK.

[1] A single adult male from Tinta is much larger (wing, 195) and much more heavily banded above than any specimen in the series of *peruvianus* and seems to be referable to *cinnamominus*.

[2] Birds from western Patagonia (Chubut) and Tierra del Fuego agree with those from Chile in dimensions and in the males having the tail-tips rufous and with only one (subterminal) black bar on the inner web of the outermost rectrix. Males from western Argentina (Mendoza to Salta) and Buenos Aires Province generally have the inner web of the outer rectrix crossed by three to five black bands, and a fair proportion show grayish instead of rufous tail-tips. There are, however, exceptions to this rule. Among twenty-five males from Chile, two (Santiago and Pelal, Temuco) have three, and one from Hacienda Mansel, Santiago, even has five black cross-bars, whereas two from Noetinger, Cordoba, and two others from near Buenos Aires have but one subterminal bar! Of three males from Paraguay (Sapucay), all with grayish tail-tips, one has five broad bars, the two others only one; of two from Uruguay, the one has two bars, the other only one. All these birds are about the same size and while no fast line can be drawn against *cearae*, it seems appropriate to unite the populations of Argentina, Uruguay and Paraguay with *cinnamominus* and to restrict *cearae* to Brazil.

Measurements.—Wing of adult males: Chile, 188–198; western Chubut, 190–198; Tierra del Fuego, 195–197; Cordoba, 188–193; Mendoza, 190; Tucumán, 190–195; Buenos Aires, 183–195; Uruguay, 192–195; Paraguay (Sapucay), 190–195; Falkland Islands, 200.

Additional material examined.—Chile: Coquimbo to Llanquihue, 28.—Argentina: Valle del Lago Blanco, Chubut, 17; Cordoba, 4; Buenos Aires Province, 14; Lujan, Mendoza, 2; Salta, 2; Straits of Magellan, 7; Viamonte, Tierra del Fuego, 3; Falkland Islands, 2.—Uruguay: 5.—Paraguay: Sapucay and Villa Rica, 6.—Bolivia: Charuplaya, 1; Parotani, 1.—Peru: Tinta, 1.

[3] *Falco sparverius cearae* (Cory): Very close to *F. s. cinnamominus* but smaller; males with grayish instead of rufous tail-tips and with three to six black cross-

Falco gracilis (not of Temminck, 1821, nor of Lesson, 1830) Swainson, Anim. Menag., p. 281, Dec. 31, 1837—"in the province of Bahia," Brazil (location of type not stated, probably in the Swainson Collection, University Museum, Cambridge, Mass.).

(*Tinnunculus sparverius*) var. *australis* (not *Falco australis* Gmelin, 1788) Ridgway, Proc. Acad. Nat. Sci. Phila., 1870, p. 149—new name for *Falco gracilis* Swainson.[1]

Cerchneis sparveria cearae Cory, Field Mus. Nat. Hist., Orn. Ser., **1**, p. 318 (note), Aug. 7, 1915—Quixada, Ceará, Brazil (type in Field Museum of Natural History, examined).

Falco sparverius eidos Peters, Bds. World, **1**, p. 305 (after June 1), 1931—new name for *Tinnunculus sparverius* var. *australis* Ridgway, preoccupied; Stone and Roberts, Proc. Acad. Nat. Sci. Phila., **86**, p. 373, 1934—Descalvados, Matto Grosso.

Falco sparverius (not of Linnaeus) Wied, Beitr. Naturg. Bras., **3**, (1), p. 116, 1830—from Rio de Janeiro (Serra de Inua) northward; Burmeister, Syst. Uebers. Th. Bras., **2**, (1), p. 93, 1855—Nova Friburgo, Rio (habits).

Tinnunculus sparverius Pelzeln, Verh. Zool. Bot. Ges. Wien, **13**, p. 634, 1863—Rio de Janeiro (Sapitiba), São Paulo (Mattodentro, Ypanema, Registo Velho) and Matto Grosso (Cuyaba) (soft parts); idem, Orn. Bras., **1**, p. 5, 1867—same localities; Reinhardt, Vidensk. Medd. Naturhist. Foren., 1870, p. 71—Minas Geraes; Berlepsch, Journ. Orn., **21**, p. 284, 1873—Blumenau, Santa Catharina.

Tinnunculus (*Poecilornis*) *gracilis* Cabanis, Journ. Orn., **22**, p. 229, 1874—Cantagallo, Rio de Janeiro.

Cerchneis cinnamomina (not *Falco cinnamominus* Swainson) Sharpe, Cat. Bds. Brit. Mus., **1**, p. 439, 1874—part, spec. e–k, Bahia, Brazil.

bars on the inner web of the outermost rectrix. These color-characters, however, are not absolutely constant. There are three specimens (one each from Therezopolis, Rio; Quixada, Ceará; Chapada, Matto Grosso) which, like *cinnamominus*, have but one black subterminal bar and the Chapada bird has the tail-tips as decidedly rufous as any from Chile. Birds from extreme southern Brazil (Santa Catharina and Rio Grande do Sul) in dimensions are truly intermediate to *cinnamominus*.

In the light of the material now before us the type of *cearae* proves to be an individual mutant of "*australis*" (=*eidos*). In paleness of the rufous parts of the plumage it is closely approached by one from Goyaz and even surpassed by one of our Macate specimens of *F. s. peruvianus*, while the white outer margin to the first primary is even more developed in a male from Paysandu, Uruguay. The rufous crown-patch is rather more extensive than in any other Brazilian skin but this feature is of no consequence in view of its variability in the present as well as in the allied races. Wing of adult males, 172–185 (in one case 190); adult females, 183–191.

Additional material examined.—Bahia: Carahyba, near Joazeiro, 1; Pão de Canoa, Rio Preto, 1; Bahia, 4.—Rio de Janeiro, 5.—Matto Grosso: Serra da Chapada, 1; Chapada, 4.—Santa Catharina: Blumenau, 1.—Rio Grande do Sul, 4.—Bolivia: Puerto Esperanza, Rio Paraguay, 1.

[1] As *australis* has been proposed as a substitute for the preoccupied *Falco gracilis* Swainson, the specimen from Paraná, Paraguay, in the U. S. National Museum (No. 20937) has no claims whatever to be regarded as "type."

Cerchneis sparveria cinnamomina Berlepsch and Ihering, Zeits. Ges. Orn., **2**, p. 171, 1885—Taquara and Arroio Grande, Rio Grande do Sul; Holt, Bull. Amer. Mus. N. H., **57**, p. 284, 1928—Alto Itatiaya, Rio de Janeiro.

Falco sparverius australis Mearns, Auk, **9**, p. 267, 1892 (crit.); Allen, Bull. Amer. Mus. N. H., **5**, p. 147, 1893—Chapada, Matto Grosso.

Tinnunculus cinnamominus Ihering, Ann. Est. Rio Grande do Sul, **16**, p. 141, 1899—Mundo Novo, São Lourenco and Pedras Brancas; idem, Rev. Mus. Paul., **3**, p. 367, 1899—Ypiranga, São Paulo; idem, l.c., **4**, p. 163, 1900—Cantagallo and Nova Friburgo, Rio de Janeiro.

Tinnunculus sparverius cinnamominus Ihering, Cat. Faun. Braz., **1**, p. 99, 1907—São Paulo (Ypiranga, Piracicaba) and Paraná (Ourinho); Luderwaldt, Zool. Jahrb. (Syst.), **27**, p. 341, 1909—Campo Itatiaya.

Tinnunculus sparverius australis Hellmayr, Nov. Zool., **15**, p. 90, 1908—Goyaz; Ménégaux, Rev. Franç. d'Orn., **5**, p. 38, 1917—Pocone, Matto Grosso.

Cerchneis sparveria australis Reiser, Denks. Math.-Nat. Kl. Akad. Wiss. Wien, **76**, p. 91, 1910—Bahia (Carnahyba and Solidade, near Joazeiro; Pao de Canoa, Rio Preto); Chapman, Bull. Amer. Mus. N. H., **34**, p. 380, 1915 (crit.); Cory, Field Mus. Nat. Hist., Orn. Ser., **1**, p. 316, 1915 (crit.); Sztolcman, Ann. Zool. Mus. Pol. Hist. Nat., **5**, p. 124, 1926—Rio Claro, Serra da Esperanca, Faz. Concordia, Invernadinha, Vermelho, etc., Paraná; Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **12**, p. 454, 1929—Fazenda Inhuma, Maranhão and Philadelphia (lower Tocantins), Goyaz; Naumburg, Bull. Amer. Mus. N. H., **60**, p. 114, 1930—Matto Grosso; Pinto, Rev. Mus. Paul., **19**, p. 107, 1935—Rio Gongogy and Barra, Bahia; idem, l.c., **20**, p. 54, 1936—Jaragua, Rio das Almas, Goyaz.

Cerchneis cinnamomina australis Swann, Syn. List Accip., p. 157, 1920 (chars.; range); idem, Syn. Accip., p. 226, 1922 (chars.; range).

Falco sparverius cearae Peters, Bds. World, **1**, p. 305, 1931 (ex Cory).

Cerchneis sparverius eidos Pinto, Rev. Mus. Paul., **22**, p. 92, 1938—Bahia (Barra do Rio Grande, Rio Gongogy), Minas Geraes (Pirapora, Maria da Fé), Goyaz (Rio das Almas, Rio São Domingos), São Paulo (Ypiranga, São Miguel Archanjo, Valparaizo, Itapetininga, Presidente Epitacio, Capivary, Braunau, Albuquerque Lins, Franca, São Carlos), and Paraná (Jacarézinho).

(?)*Cerchneis sparverius brevipennis* Gyldenstolpe, K. Svensk. Vetensk. Akad. Handl., (3), **23**, p. 56, 1945—Bolivia (Bresta; Santa Rosa; Orion, El Beni) (disc.).

Cerchneis sparverius australis Swann, Monog. Bds. Prey, **2**, p. 467, 1945 (monog.).

Range.—Tableland of Brazil, from southern Maranhão (Alto Parnahyba) and Ceará south to Matto Grosso and Rio Grande do Sul, west to the Bolivian border (Puerto Esperanza).

Field Museum Collection.—24: Brazil (Quixada, Ceará, 1; Inhuma, Maranhão, 1; Philadelphia, Goyaz, 2; Rio São Miguel,

Goyaz, 3; Nova Roma, Rio Paraná, Goyaz, 1; Ilha Paraná, Goyaz, 1; Forte, Goyaz, 1; São Marcello, Bahia, 2; Bauru, São Paulo, 1; Rio Therezopolis, São Paulo, 1; Municipio de Lius, São Paulo, 3; Chapada, Matto Grosso, 4; Vaccaria, Matto Grosso, 3).

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